```
### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 3106900061...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
### Status: Signing onto Dialog
 ********
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
### Status: Connected


Dialog level 00.05.02D

Last logoff:  14jun00 06:57:05
Logon file001 14jun00 08:42:53

File   1:ERIC  1966-2000/May
       (c) format only 2000 The Dialog Corporation
*File   1: File has been reloaded. See HELP NEWS 1.

      Set  Items  Description
      ---  -----  -----------
?begin 411
       14jun00 08:43:16 User219455 Session D634.1
            $0.22    0.061 DialUnits File1
     $0.22  Estimated cost File1
     $0.02  TYMNET
     $0.24  Estimated cost this search
     $0.24  Estimated total session cost   0.061 DialUnits

File 411:DIALINDEX(R)

DIALINDEX(R)
   (c) 2000 The Dialog Corporation plc

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
?sf compsci,patents
>>>          64 does not exist
>>>         351 is unauthorized
>>>         352 is unauthorized
>>>         353 is unauthorized
>>>4 of the specified files are not available
   You have 36 files in your file list.
   (To see banners, use SHOW FILES command)
?show files

File  Name
----  -------------
   2: INSPEC_1969-2000/May W1
   6: NTIS_1964-2000/Jul W1
```

Dialog Search 09/08,946/ 6/14/00

```
   8: Ei Compendex(R)_1970-2000/May W2
  34: SciSearch(R) Cited Ref Sci_1990-2000/Jun W1
  35: DISSERTATION ABSTRACTS ONLINE_1861-1999/DEC
  65: Inside Conferences_1993-2000/Jun W2
  77: Conference Papers Index_1973-2000/May
  92: IHS Intl.Stds.& Specs._1999/Nov
  94: JICST-EPlus_1985-2000/Feb W2
  99: Wilson Appl. Sci & Tech Abs_1983-2000/May
 103: Energy SciTec_1974-2000/Mar B2
 108: Aerospace Database_1962-2000/Apr
 144: Pascal_1973-2000/Jun W2
 202: Information Science Abs._1966-2000/Jan
 233: Internet & Personal Comp. Abs._1981-2000/Jun
 238: Abs. in New Tech & Eng._1981-2000/May
 239: Mathsci_1940-2000/Jul
 275: Gale Group Computer DB(TM)_1983-2000/Jun 14
 434: SciSearch(R) Cited Ref Sci_1974-1989/Dec
 647: CMP  Computer Fulltext_1988-2000/May W4
 674: Computer News Fulltext_1989-2000/May W4
 696: DIALOG Telecom. Newsletters_1995-2000/Jun 13
 123: CLAIMS(R)/Current Legal Status_1980-2000/May 30
 340: CLAIMS(R)/US Patent_1950-00/May 30
 342: Derwent Patents Citation Indx_1978-98/200004
 344: Chinese Patents ABS_Apr 1985-2000/Feb
 345: Inpadoc/Fam.& Legal Stat_1968-2000/UD=200022
 347: JAPIO_Oct 1976-1999/Dec(UPDATED 000530)
 348: European Patents_1978-2000/Jun W01
 349: PCT Fulltext_1983-2000/UB=, UT=20000525
 371: French Patents_1961-2000/BOPI 0022
 447: IMSWorld Patents International_2000/May
 652: US Patents Fulltext_1971-1979
 653: US Patents Fulltext_1980-1989
 654: US Pat.Full._1990-2000/Jun 13
 670: LitAlert_1973-2000/UD=200018

?s (heterogeneous or variable)

Your SELECT statement is:
   s (heterogeneous or variable)

          Items   File
          -----   ----
         163021     2: INSPEC_1969-2000/May W1
          33205     6: NTIS_1964-2000/Jul W1
         103029     8: Ei Compendex(R)_1970-2000/May W2
         170840    34: SciSearch(R) Cited Ref Sci_1990-2000/Jun W1
          55896    35: DISSERTATION ABSTRACTS ONLINE_1861-1999/DEC
          11723    65: Inside Conferences_1993-2000/Jun W2
           5868    77: Conference Papers Index_1973-2000/May
           1279    92: IHS Intl.Stds.& Specs._1999/Nov
          31975    94: JICST-EPlus_1985-2000/Feb W2
          10953    99: Wilson Appl. Sci & Tech Abs_1983-2000/May
          71610   103: Energy SciTec_1974-2000/Mar B2
          53351   108: Aerospace Database_1962-2000/Apr
         166858   144: Pascal_1973-2000/Jun W2
           2618   202: Information Science Abs._1966-2000/Jan
           1155   233: Internet & Personal Comp. Abs._1981-2000/Jun
```

```
  1688   238: Abs. in New Tech & Eng._1981-2000/May
122189   239: Mathsci_1940-2000/Jul
 21542   275: Gale Group Computer DB(TM)_1983-2000/Jun 14
 25735   434: SciSearch(R) Cited Ref Sci_1974-1989/Dec
  5507   647: CMP  Computer Fulltext_1988-2000/May W4
  1707   674: Computer News Fulltext_1989-2000/May W4
   759   696: DIALOG Telecom. Newsletters_1995-2000/Jun 13
    76   123: CLAIMS(R)/Current Legal Status_1980-2000/May 30

### Status: Break Sent.

?s (heterogeneous or variable)(5n)(operating(w)(environments or systems))

Your SELECT statement is:
   s (heterogeneous or variable)(5n)(operating(w)(environments or systems))

Items   File
-----   ----
   51     2: INSPEC_1969-2000/May W1
    1     6: NTIS_1964-2000/Jul W1
   18     8: Ei Compendex(R)_1970-2000/May W2
    9    34: SciSearch(R) Cited Ref Sci_1990-2000/Jun W1
    4    35: DISSERTATION ABSTRACTS ONLINE_1861-1999/DEC
    1    65: Inside Conferences_1993-2000/Jun W2
    4    94: JICST-EPlus_1985-2000/Feb W2
    1    99: Wilson Appl. Sci & Tech Abs_1983-2000/May
    3   103: Energy SciTec_1974-2000/Mar B2
    2   108: Aerospace Database_1962-2000/Apr
    1   144: Pascal_1973-2000/Jun W2
    4   202: Information Science Abs._1966-2000/Jan
    4   233: Internet & Personal Comp. Abs._1981-2000/Jun
    2   239: Mathsci_1940-2000/Jul
   40   647: CMP  Computer Fulltext_1988-2000/May W4
   18   674: Computer News Fulltext_1989-2000/May W4
    7   340: CLAIMS(R)/US Patent_1950-00/May 30
    1   342: Derwent Patents Citation Indx_1978-98/200004
    1   345: Inpadoc/Fam.& Legal Stat_1968-2000/UD=200022
    1   347: JAPIO_Oct 1976-1999/Dec(UPDATED 000530)
   22   348: European Patents_1978-2000/Jun W01
   13   349: PCT Fulltext_1983-2000/UB=, UT=20000525
    2   652: US Patents Fulltext_1971-1979
    9   653: US Patents Fulltext_1980-1989
   45   654: US Pat.Full._1990-2000/Jun 13

   25 files have one or more items; file list includes 36 files.

?s user(w)profile and (heterogeneous or variable)(5n)(operating(w)(environments
or systems))

Your SELECT statement is:
   s user(w)profile and (heterogeneous or
variable)(5n)(operating(w)(environments or systems))

Items   File
-----   ----
    1   654: US Pat.Full._1990-2000/Jun 13
```

1 file has one or more items; file list includes 36 files.

```
?begin 654
       14jun00 08:49:44 User219455 Session D634.2
            $5.23    4.187 DialUnits File411
     $5.23  Estimated cost File411
     $0.35  TYMNET
     $5.58  Estimated cost this search
     $5.82  Estimated total session cost   4.248 DialUnits


File 654:US Pat.Full.  1990-2000/Jun 13
       (c) format only 2000 The Dialog Corp.
*File 654: Reassignment data current through 12/06/1999 recordings.
Due to recent processing problems, the SORT command is not working.

      Set  Items  Description
      ---  -----  -----------
? s user(w)profile and (heterogeneous or variable)(5n)(operating(w)(environments
or systems))
          225222  USER
          104754  PROFILE
             616  USER(W)PROFILE
           16585  HETEROGENEOUS
          187638  VARIABLE
          384665  OPERATING
           52039  ENVIRONMENTS
          426256  SYSTEMS
              45  (HETEROGENEOUS OR VARIABLE)(5N)OPERATING(W)(ENVIRONMENTS
                  OR SYSTEMS)
      S1       1  USER(W)PROFILE AND (HETEROGENEOUS OR
                  VARIABLE)(5N)(OPERATING(W)(ENVIRONMENTS OR SYSTEMS))
?t 1/2,ab,kwic/1

 1/2,AB,KWIC/1
DIALOG(R)File 654:US Pat.Full.
(c) format only 2000 The Dialog Corp. All rts. reserv.

             02850941
Utility
PROVISION  OF  SECURE  ACCESS  TO  EXTERNAL  RESOURCES  FROM  A DISTRIBUTED
COMPUTING ENVIRONMENT

PATENT NO.:  5,815,574
ISSUED:      September 29, 1998 (19980929)
INVENTOR(s): Fortinsky, Michael S., Netanya, IL (Israel)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company
             or Corporation), Armonk, NY (New York), US (United States of
             America)
             [Assignee Code(s): 42640]
APPL. NO.:   8-563,692
FILED:       November 28, 1995 (19951128)
PRIORITY:    2138302, CA (Canada), December 15, 1994 (19941215)
U.S. CLASS:  380-25
INTL CLASS:  [6] H04L 9-00
FIELD OF SEARCH: 380-25; 380-21
```

References Cited
U.S. PATENT DOCUMENTS

5,214,700	5/1993	Pinkas et al.	380-25
5,220,603	6/1993	Parker	380-25
5,339,403	8/1994	Parker	380-25
5,349,643	9/1994	Cox et al.	380-25
5,481,613	1/1996	Ford et al.	380-21
5,491,752	2/1996	Kaufman et al.	380-25
5,495,533	2/1996	Linehan et al.	380-25
5,535,276	7/1996	Ganesan	380-25
5,537,475	7/1996	Micali	380-25
5,590,199	12/1996	Krajewski, Jr. et al.	380-25
5,659,616	8/1997	Sodia	380-25

PRIMARY EXAMINER: Cangialosi, Salvatore
ATTORNEY, AGENT, OR FIRM: Cameron, Douglas W.; Drumheller, Ronald L.
CLAIMS: 4
EXEMPLARY CLAIM: 1
DRAWING PAGES: 2
DRAWING FIGURES: 2
ART UNIT: 222
FULL TEXT: 1136 lines

ABSTRACT

In a distributed computing environment, in which a client needing to access a server is issued, by a security server, with a ticket including an encoded certificate identifying, when decoded, the identity and privilege attributes of the client in a format understood by a server within the environment, access to a resource external to the environment through such a server within the environment is provided, when a request involving such access is received by the security server, by issuing an extended certificate including additional data which can be decoded to provide information decoded as to the identity and privilege attributes of the client with respect to and in a format acceptable to the external server, the additional data being recognized and decodable and formatable by that server within the environment which provides access to the external server, but transmitted within the environment in a format compatible with the certificates in regular tickets. A security server issuing a ticket including such an extended privilege attribute certificate has a registry extended to include data as to a client's privilege attributes with respect to accessible external servers, together with data as to the structure in which such data is to be presented, and an application server required to handle such extended certificates has attribute handlers to structure the decoded data for presentation to the external server.

... environment released by the Open Software Foundation (hereinafter OSF(tm)) to support distributed computing involving heterogeneous machines and operating systems . The OSF distributed computing environment (hereinafter DCE) utilizes a ticket based security system based upon...
... To access these resources, a client must present a complex attribute that contains a whole user profile (including userid's, group list, and other security data). Instead of specifying all the individual...

... attribute A2 is defined. An instance of attribute A2 contains in its

value field a user profile . A2 can be used only if A2's attribute handler is installed at both the...

...target server. A2's handler is code that knows how to seal and extract a user profile into and from an XPAC. The administrator would specify the following data in the registry...

```
?begin 411
       14jun00 08:52:00 User219455 Session D634.3
            $7.15    1.212 DialUnits File654
               $3.20  1 Type(s) in Format  9 (UDF)
            $3.20  1 Types
    $10.35  Estimated cost File654
     $0.15  TYMNET
    $10.50  Estimated cost this search
    $16.32  Estimated total session cost   5.460 DialUnits

File 411:DIALINDEX(R)

DIALINDEX(R)
   (c) 2000 The Dialog Corporation plc

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
?sf compsci,patents
>>>          64 does not exist
>>>         351 is unauthorized
>>>         352 is unauthorized
>>>         353 is unauthorized
>>>4 of the specified files are not available
   You have 36 files in your file list.
   (To see banners, use SHOW FILES command)
?s user(w)profile? and (heterogeneous or
variable)(5n)(operating(5n)(environment? or system?))

Your SELECT statement is:
   s user(w)profile? and (heterogeneous or
variable)(5n)(operating(5n)(environment? or system?))

          Items   File
          -----   ----
              1   275: Gale Group Computer DB(TM)_1983-2000/Jun 14
>>>File 349 processing for SYSTEM? stopped at SYSTEMSW
              3   349: PCT Fulltext_1983-2000/UB=, UT=20000525
Processing
              6   654: US Pat.Full._1990-2000/Jun 13

   3 files have one or more items; file list includes 36 files.
   One or more terms were invalid in 2 files.

?begin 275,349,654
       14jun00 08:57:29 User219455 Session D634.4
            $7.24    5.793 DialUnits File411
     $7.24  Estimated cost File411
     $0.30  TYMNET
     $7.54  Estimated cost this search
    $23.86  Estimated total session cost  11.252 DialUnits
```

```
SYSTEM:OS  - DIALOG OneSearch
  File 275:Gale Group Computer DB(TM)  1983-2000/Jun 14
         (c) 2000 The Gale Group
  File 349:PCT Fulltext  1983-2000/UB=, UT=20000525
         (c) 2000 WIPO/MicroPatent
  File 654:US Pat.Full.  1990-2000/Jun 13
         (c) format only 2000 The Dialog Corp.
*File 654: Reassignment data current through 12/06/1999 recordings.
Due to recent processing problems, the SORT command is not working.

      Set  Items  Description
      ---  -----  -----------
?s user(w)profile? and (heterogeneous or
variable)(5n)(operating(5n)(environment? or system?))
>>>File 349 processing for SYSTEM? stopped at SYSTEMSW
Processing
          527092  USER
          207111  PROFILE?
            1383  USER(W)PROFILE?
           31669  HETEROGENEOUS
          270490  VARIABLE
          663958  OPERATING
          490600  ENVIRONMENT?
         1641237  SYSTEM?
             684  (HETEROGENEOUS OR VARIABLE)(5N)OPERATING(5N)(ENVIRONMENT?
                  OR SYSTEM?)
      S1        9  USER(W)PROFILE? AND (HETEROGENEOUS OR
                  VARIABLE)(5N)(OPERATING(5N)(ENVIRONMENT? OR SYSTEM?))
?t 1/2,ab,kwic/1-9

 1/2,AB,KWIC/1     (Item 1 from file: 349)
DIALOG(R)File 349:PCT Fulltext
(c) 2000 WIPO/MicroPatent. All rts. reserv.

00391858
SERVICE PROVISION IN COMMUNICATIONS NETWORKS
FOURNITURE DE SERVICES SUR DES RESEAUX DE COMMUNICATIONS
Patent Applicant/Assignee:
  BRITISH TELECOMMUNICATIONS PLC
  COX Richard Dewitt
  HUNTER Andrew Timothy
  RAND Jeffrey Kevin
Inventor(s):
  COX Richard Dewitt
  HUNTER Andrew Timothy
  RAND Jeffrey Kevin
Patent and Priority Information (Country, Number, Date):
  Patent:               WO 9523483 A1 19950831
  Application:          WO 95GB421 19950228  (PCT/WO GB9500421)
  Priority Application: EP 94301397 19940228
Designated States: AU; CA; CN; JP; KR; NZ; US; AT; BE; CH; DE; DK; ES; FR;
  GB; GR; IE; IT; LU; MC; NL; PT; SE
Main International Patent Class: H04Q-003/00;
Publication Language: English
Fulltext Word Count: 23489
```

English Abstract
It is desirable in communications networks to be able to offer a variety of services to the customer, and to be able to add or modify the portfolio of services available. A service delivery infrastructure (21) is provided, which would sit in the Service Control Point of an intelligent network architecture, and which delivers services using an array of service independent features (20). In the arrangement described, the service delivery infrastructure (21) has an object oriented architecture and interacts with systems, such as billing (22) and network management (40), in the communications network by means of objects within the infrastructure (21). An aspect of the infrastructure (21) is the provision of selected sets of services to users of the communications network, which selected sets effectively provide dedicated service networks (30) to each customer.

French Abstract
Il est souhaitable que des reseaux de communications puissent offrir toute une variete de services au client et subir une adjonction ou une modification des services disponibles. Une infrastructure (21) de fourniture de services, a mettre en place au point de controle de services propre a une architecture de reseau intelligent, fournit des services a l'aide d'une batterie de caracteristiques (20) independantes de ces services. La disposition decrite prevoit une infrastructure (21) de fourniture de services dotee d'une architecture orientee objet et interagit avec des systemes, tels que la facturation (22) et la gestion (40) du reseau, relevant de ce systeme de communications, au moyen d'objets presents dans l'infrastructure (21). Un aspect de cette infrastructure (21) concerne des series choisies de services destines aux utilisateurs du reseau de communications, series qui permettent de fournir des reseaux (30) de services specialises a chaque client.

Fulltext Availability:
Detailed Description
Claims

Detailed Discription
... relevant service independent features in the context of the initiating call by reference to a user profile , and using the service delivery system to respond to ...Said verification and response can be carried out 'by means of a blackboard technique, said user profile calling on service independent features which each will register a view with the blackboard and...or all services available to them; the services a user has is maintained in a user profile .
As provider of virtual networks, a carrier or network operator will create, enable, modify, disable...to a user is synonymous with, a directory number.

Every user is described by a user profile containing information about the individual and which directory numbers that a user has. Each directory...station.

The virtual network administrator will add, modify and

-delete the profiles describing users. A user profile exhibits a state of enabled or disabled which is set by the virtual network administrator...

...a state of enabled or disabled.

A Directory number keyed list of schedules of services.

User profiles are addressable by the user identity, authorisation code or by one of the directory numbers that a user possesses. User profiles are persistent. Each DN that a user has within his profile has a schedule. The...
...provide any form of logic checking on the sharing of service profiles 900).

once a user profile exists it is not possible to modify the user id, ail other components may be changed.

The virtual network administrator is able to create and delete user profiles . User profiles may only be deleted when the directory number list is empty. User profiles are modifiable by a virtual network administrator. A user may modify the authorisation code and PIN.

1. 4. 8 User Director,7
Every user on a virtuai network has a user profile within that virtual network. User profiles are held within a user directory. It is possible to locate one, and only one, user profile in the user di rectory using the following individual keys:

User identity.

Authorisation code.

Directory a user profile).
User profiles may be added to, replaced within and deleted from the usear directory by the virtual...profile and deploying it at the virtual network 800 (STEP 1); and ii) updating the user profile with a VDN and service profile reference and deploying the updated user profile to the virtual network 800 (STEP 2).

In more detail, before a service becomes available...a key to a service name and a service profile (see the earlier discussion on user profiles ; Section 1. 4. 7). The service profile gives the service the information required to handle...granularity:

0 Full
0 Physical Network
Network Interconnect
Virtual Network(s)
0 Feature Library
0 User Profiles of Virtual Network(s)
'0 Service Profiles of Service(s) of Virtual Network(s) Number...

...to log activity and event messages. The log utility interfaces with the UNIX (computer hardware operating system developed by AMT) file system .
Log messages are of variable length. Log files are in ASCII format.

it is possible to determine the following for...maintains associations between Virtual Network Addresses and Virtual

- Directory Numbers. The User Directory 3310 stores user profiles which link virtual directory numbers and authorisation codes to the services provisioned for a user...

...for use by the Service Engine 825 in delivering a service. 2, Profile includes a user profile 3405 and all of its related service profiles 3410. A Profile is obtained from the...service engine governor 825. It contains a virtual directory number 3415, as well as the user profile and one or more service profiles.

Referring to Figure 23, a Virtual Network 800 also...

...rL a particular virtual network 800.

3. 4: 4 User Directorv
Refegring to Figure 39, user profiles 3405 detail user related information and the provisionable capabilities for each user on a virtual network. User profiles are stored in a user directory 3900. User profiles 3405 can be obtained from the user directory by use of a virtual directory number

-3415, an authorisation code, or a user profile id key. A user profile may be added to the directory 3900 or ...Virtual Directory Numbers are created and deployed, together with VNA and VDN associations.

STEP 4510: User Profiles are created and deployed, containing-user data, VDN Service Profile references and any necessary "...created and deployed to a Virtual Network 800 in the SDI 200.

STEP 4705: A User Profile is updated with a VDN and a Service Profile reference and deployed.

5. PROCESSING AN...or specify specialised access mechanisms will be referenced in the network operator profile.

A customer (user) profile provides the customer with the ability to govern the behaviour of all users of his...

...network wide are specified in the customer profile.
Every virtual network DN has an associated user profile describing what is available to that number on the virtual network 800. User profiles are contained within the customer virtual network user list. A user profile is retrieved based on ...call. The SDI 200 makes a translation to a virtual network DN and retrieves a user profile based on the originating DN. The user profile contains a list of originating and terminating features that may be invoked during the call ...

Claim
... the nodes of the virtual network, b) one or more user identifiers, and c) a user profile associated with each user identifier and containing data identifying one or more services, and user...

...ARTICLE 19) B) communicating with the representation of the identified virtual network to identify a user profile associated with that virtual node identifier, C) communicating with the identified user profile to verify that the requested service is available, to identify

the relevant service package and...

1/2,AB,KWIC/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT Fulltext

00391857
FEATURE PROVISIONING AND MONITORING IN COMMUNICATIONS NETWORKS
FOURNITURE ET SURVEILLANCE DE CARACTERISTIQUES SUR DES RESEAUX DE COMMUNICATIONS
Patent Applicant/Assignee:
BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY
COX Richard Dewitt
HUNTER Andrew Timothy
RAND Jeffrey Kevin
Inventor(s):
COX Richard Dewitt
HUNTER Andrew Timothy
RAND Jeffrey Kevin
Patent and Priority Information (Country, Number, Date):
Patent: WO 9523482 A1 19950831
Application: WO 95GB420 19950228 (PCT/WO GB9500420)
Priority Application: EP 94301398 19940228
Designated States: AU; CA; CN; JP; KR; NZ; US; AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE
Main International Patent Class: H04Q-003/00;
Publication Language: English
Fulltext Word Count: 22941

English Abstract
A service delivery infrastructure is provided for use with a communications network to provide selected sets of services to different customers of the network. Each customer of the network effectively sees a dedicated service network for their private use. The sets of services available to any customer can be readily modified because the services draw on lists of service independent features which can simply be accessed and changed to modify the services available on a service network. In real-time provision of a service, the infrastructure relies on a blackboard technique in which a request for a service calls up a profile related to the request which identifies features which are available to the user making the request. A feature from the profile will be triggered if, on registering a view with a blackboard (66), necessary scenes for that feature are present on the blackboard (66). If a feature is triggered, it posts the result on the blackboard (66) and processes the scenes which triggered it to provide the service requested.

French Abstract
On decrit une infrastructure de prestation de services qu'on utilise avec un reseau de communications pour fournir differents ensembles de services a differents clients du reseau dont chacun trouve ainsi un reseau de services specialises servant a son usage prive. Les ensembles de services mis a la disposition d'un client sont faciles a modifier car ces services puisent dans la liste des caracteristiques, independantes des services, auxquelles on peut acceder pour modifier les services disponibles sur un reseau de service. Pendant une prestation de service en temps reel, l'infrastructure est basee sur une technique de tableau noir dans

laquelle qu'une demande de service donne un profil, apparente a la demande, qui identifie les caracteristiques disponibles pour le demandeur. Une caracteristique de ce profil sera mise en service si, lors de l'enregistrement d'une vue sur le tableau noir (66), les scenes necessaires a cette caracteristique sont presentees sur ce tableau noir. Si une caracteristique est mise en service, le resultat s'affiche sur le tableau noir et les scenes qui l'ont mises en service sont traitees, ce qui permet de fournir le service demande.

Fulltext Availability:
Detailed Description
Claims

Detailed Discription
... relevant service independent features in the context of the initiating call by reference to a user profile , and using the service ...Said verification and response can be carried out by means of a blackboard technique, said user profile calling on service independent features which each will register a view with the blackboard and...or all services available to them; the services a user has is maintained in a user profile .

As provider of virtual networks, a carrier or network operator will create, enable, modify, disable...to a user is synonymous with, a directory number.

Every user is described by a user profile containing information about the individual and which directory numbers that a user has. Each directory...station.

The virtual network administrator will add, modify and delete the profiles describing users. A user profile exhibits a state of enabled or disabled which is set by the virtual network administrator.

4.4.7 User Profiles
It is necessary to hold certain information about a user, within the SDI 200, that...
...a state-of enabled or disabled.

A Directory number keyed list: of schedules of services.

User profiles are addressable by the user identity, authorisation code or by one of the directory numbers that a user possesses. User profiles are persistent. Each DN that a user has within his profile has a schedule. The...

...provide any form of logic checking on the sharing of service profiles 900).

Once a user profile exists it is not possible to modify the user id, all other components may be changed.

The virtual network administrator is able to create and delete user profiles . User profiles may only be deleted when the directory number list is empty. User profiles are modifiable by a virtual network administrator. A user may modify the authorisation code and PIN.

1. 4. 8 User Directory
Every user on a virtual network has a user profile within that virtual network. User profiles are held within a user directorl% It is possible to locate one, and only one, user profile in the user directory using the following individual keys:

0 User identity.

0 Authorisation code.

0 Directory number.

Thus, for a given DN it is possible to obtain, from a user profile , a service name and a service profile identifier (and, indeed, any other information in a user profile).

User profiles may be added to, replaced within and deleted from the user directory by the virtual...it at the virtual network 800 (STEP 1); and WO 95/23482 ii) updating the user profile with a VDN and service profile reference and deploying the updated user profile to the virtual network 800 (STEP 2).

In more detail, before a service becomes available...a key to a service name and a service profile (see the earlier discussion on user profiles ; Section 1. 4. 7). The service profile gives the service the information required to handle...Full
6 Physical Network
0 Network Interconnect
a Virtual Network(s)
0 Feature Library
4 User Profiles of Virtual Network(s)
0 Service Profiles of Service(s) of Virtual Network(s) 0...

...to log activity and event messages. The log utility interfaces with the UNIX (computer hardware operating system developed by AMT) file system .

Log messages are of variable length. Log files are in ASCII format.

It is possible to determine the following for...maintains associations between Virtual Network Addresses and Virtual Directory Numbers. The User Directory 3310 stores user profiles which link virtual directory numbers and authorisation codes to the services provisioned for a user... for use by the Service Engine 825 in delivering a service. A Profile includes a user profile 3405 and all of its related service profiles 3410. A Profile is obtained from the...
...WO 95123482 governor 825. It contains a virtual directory number 3415, as well as the user profile and one or more service profiles.

Referring to Figure 23, a Virtual Network 800 also...

...in a particular virtual network 800.

3.4.4 User Directory
Referring to Figure 39, user profiles 3405 ...detail user related information and the provisionable capabilities for each user on a virtual network. User profiles are stored in a user directory 3900. User

profiles 3405 can be obtained from the user directory by use of a virtual directory number 3415, an authorisation code, or a user profile id key. A user profile may be added to the directory 3900 or one may be deleted by adding a...Virtual Directory Numbers are created and deployed, together with VNA and VDN associations.

STEP, 4510: User Profiles are created and deployed, containing user data, VDN Service Profile references and any necessary IIVDN...

...created and deployed to a Virtual Network 800 in the SDI :200.
STEP 4705: A User Profile is updated with a VDN and a Service Profile reference and deployed.

5. PROgESSING AN...or specify specialised access mechanisms will be referenced in the network operator profile.

A customer (user) profile provides the customer with the ability to govern the behaviour of all users of his...

...network wide are specified in the customer profile.

Every virtual network DN has an associated user profile describing what is available to that number on the virtual network 800. user profiles are contained within the customer virtual network user list. A user profile is retrieved based on either the authorisation code or the virtual network DN, and on...call. The SDI 200 makes a translation to a virtual network DN and retrieves a user profile based on the originating DN. The user profile contains a list of originating and terminating features that may be invoked during the call...relevant service independent features in the context of the AM, request by reference to a user profile , and responding to said initiating request in accordance with the outcome of said verification.
2...

...verification and response is carried out by use of a blackboard software processing technique, said user profile incorporating service independent features, for use in providing services, which each will register a view...

...appropriate by the preceding interaction.

3. A process according to either preceding paragraph wherein the user profile incorporates a set of service independent features which has been preselected from an available library...

...the library, and can be skeded and loaded therefrom to the set incorporated in the user profile so as to increase the range of services available to a user associated with that user profile .

5. A service logic execution process, for use in providing intelligent network services, or services...

Claim
... relevant service independent features in the context of the indating request by reference to a user profile , and responding to said initiating request in accordance with the outcome of said verification.

2...

...verification and response is carried out by use of a blackboard software processing technique, said user profile incorporating(service independent features, for use in providing services, which each will register a view...

...appropriate by the preceding interaction.

3. A process according to either preceding claim wherein the user profile incorporates a set of service independent features which has been preselected from an available librarny...

...the library, and can be selected and loaded therefrom to the set incorporated in the user profile so as to increase the range of services available to a user associated with that user profile .
5. A service logic execution process, for use in providing intelligent network services, or services...

1/2,AB,KWIC/3 (Item 3 from file: 349)
DIALOG(R)File 349:PCT Fulltext

00388393
A METHOD AND APPARATUS FOR AUTOMATIC FOCUSING OF A CONFOCAL LASER MICROSCOPE
PROCEDE ET DISPOSITIF SERVANT A EFFECTUER UNE OPERATION DE MISE AU POINT AUTOMATIQUE
Patent Applicant/Assignee:
ULTRAPOINTE CORPORATION
Inventor(s):
FAIRLEY Christopher R
THOMSPSON Timothy V
LEE Ken K
Patent and Priority Information (Country, Number, Date):
Patent: WO 9519552 A1 19950720
Application: WO 95US665 19950117 (PCT/WO US9500665)
Priority Application: US 94183536 19940118
Designated States: AM; AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; EE; ES; FI; GB; GE; HU; JP; KE; KG; KP; KR; LR; LT; LU; LV; MD; MG; MN; MW; MX; NL; NO; NZ; PL; PT; RO; RU; SD; SE; SI; SK; TJ; TT; UA; UZ; MW; SD; SZ; AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; GN; ML; MR; NE; SN; TD; TG
Main International Patent Class: G01J-001/20;
Publication Language: English
Fulltext Word Count: 89301

English Abstract
Microscope system (100) moves a target (112) in a first direction relative to a low power objective lens (110) and, during the relative motion, generates and records values of an electronic focus signal that depends on the magnitude of light (123R) reflected by the target (112). A host workstation (116) calculates a first estimate of "focus position" of target (112) at which microscope system (100) is focused, by a median point method. In the median point method, host workstation (116) calculates the sum of the recorded values and determines the position

along the range of motion at which half of this sum was exceeded, to be a first estimate of the focus position. From the intensity values of the first pass, optimal sensor gain is set for subsequent passes. Second and third estimates of the focus position can be calculated in a similar manner if necessary and the target is moved to the most recent estimate of the focus position.

French Abstract
Un systeme de microscope (100) deplace une cible (112) dans un premier sens par rapport a un objectif de faible puissance (110) et, pendant le deplacement relatif, produit et enregistre des valeurs d'un signal de mise au point electronique dependant de l'intensite de la lumiere (123R) reflechie par la cible (112). Une station hote (116) calcule une premiere estimation de la position de mise au point de la cible (112) sur laquelle se focalise le systeme de microscope (100), au moyen d'un procede de point median. Apres ledit procede, la station hote (116) calcule la somme des valeurs enregistrees et determine la position, le long de la plage de mouvement a laquelle la moitie de ladite somme a ete depassee, ce qui represente une premiere estimation de la position de mise au point. Le gain maximum de detecteur est regle pour les passes suivantes a partir des valeurs d'intensite de la premiere passe. Une deuxieme et une troisieme estimation de la position de mise au point peuvent se calculer de facon analogue si necessaire et la cible est deplacee vers l'estimation la plus recente de la position de mise au point.

Fulltext Availability:
Detailed Description

Detailed Discription
... focus signal 115's intensity is all zero, or if photodetector 114 is overloaded, then variable Marget is set to 400 micron away from coarse Z stage 122's position. Since...203, the Y-axis scanner (also referred to as "page scanner") follows a triangular wave profile 1301 (FIG. 13A) that is different from the "sawtooth" waveform at a much higher scan...

1/2,AB,KWIC/4 (Item 1 from file: 654)

03077344

Utility
USER AUTHENTICATION FROM NON-NATIVE SERVER DOMAINS IN A COMPUTER NETWORK

PATENT NO.: 6,021,496
ISSUED: February 01, 2000 (20000201)
INVENTOR(s): Dutcher, David Paul, Austin, TX (Texas), US (United States of America)
Lenharth, Scott Alan, Austin, TX (Texas), US (United States of America)
Rolette, Jr. James Michael, Round Rock, TX (Texas), US (United States of America)
Smith, Stanley Alan, Austin, TX (Texas), US (United States of America)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company or Corporation), Armonk, NY (New York), US (United States of America)

[Assignee Code(s): 42640]
APPL. NO.: 8-897,495
FILED: July 07, 1997 (19970707)
U.S. CLASS: 713-202 cross ref: 713-201; 713-202
INTL CLASS: [6] G06F 9-46; H04L 9-08
FIELD OF SEARCH: 395-187.1; 395-188.1; 395-186; 395-200.59; 395-200.33; 395-200.57; 380-25; 380-23; 707-9; 713-200; 713-201; 113-202; 280-23

References Cited

U.S. PATENT DOCUMENTS

5,073,933	12/1991	Rosenthal	380-25
5,202,921	4/1993	Herzberg et al.	380-23
5,210,795	5/1993	Lipner et al.	380-23
5,329,619	7/1994	Page et al.	395-200.33
5,347,580	9/1994	Molva et al.	380-25
5,349,643	9/1994	Cox et al.	380-25
5,369,705	11/1994	Bird et al.	380-21
5,373,559	12/1994	Kaufman et al.	380-30
5,412,723	5/1995	Canetti et al.	380-21
5,434,918	7/1995	Kung et al.	380-25
5,481,612	1/1996	Campana et al.	380-25
5,481,720	1/1996	Loucks et al.	395-187.1
5,491,750	2/1996	Bellare et al.	380-21
5,491,752	2/1996	Kaufman et al.	380-30
5,495,533	2/1996	Linehan et al.	380-21
5,502,766	3/1996	Boebert et al.	380-25
5,504,892	4/1996	Atsatt et al.	395-600
5,511,122	4/1996	Atkinson	380-25
5,560,008	9/1996	Johnson et al.	395-650
5,586,260	12/1996	Hu	395-187.1
5,604,803	2/1997	Aziz	380-25
5,655,077	8/1997	Jones et al.	395-187.1
5,689,708	11/1997	Regnier et al.	395-200.59
5,706,349	1/1998	Aditham et al.	380-25
5,742,759	4/1998	Nessett	395-187.1
5,768,503	6/1998	Olkin	395-187.1

OTHER REFERENCES

Geocities Home Page (wysiwyg://16/http://geocities.com), 1995.

"Distributing SOMObjects Using Distributed Coputing Environment," IBM Technical Disclosure Bulletin, Nov. 1996, vol. 39, No. 11, pp. 195-196.

PRIMARY EXAMINER: Hua, Ly V.
ATTORNEY, AGENT, OR FIRM: Judson, David H.; LaBaw, Jeffrey S.
CLAIMS: 26
EXEMPLARY CLAIM: 1
DRAWING PAGES: 7
DRAWING FIGURES: 15
ART UNIT: 275
FULL TEXT: 1222 lines

ABSTRACT

A method of authenticating a user of a Windows NT client normally configured against an account held at a Windows NT server. The method begins in response to a logon request at the client. In particular, the user is provided with an option to select a server domain from a set of one or more native Windows NT server domains and/or non-native server domains for authentication. The list of native and/or non-native server domains is compiled by an administrator (e.g., during installation) or by the user (at logon). In response to user selection of the server domain, a connection is then established between the Windows NT client and the server domain. The user is then authenticated at the server domain. Following successful authentication of the Windows NT client at the server domain, a Windows NT user account is then established and maintained at the client.

...authentication of the user;

FIG. 9 is a flowchart illustrating a routine for establishing a user profile at the client;

FIG. 10 is a flowchart illustrating a preferred technique for establishing a user profile at the client machine;

FIG. 11 is a flowchart illustrating a "maintenance" routine according to ...

...native operating system is then established and/or maintained at the client. If desired, a user profile may also be retrieved from the server domain and then instantiated at the client. This...access rights to the client and the server. The user may download his or her "user profile " to instantiate a particular desktop representation or other user preference so that the user consistently...

... refers to a database of user account information retained at a given server running an operating system that is different than the operating system running at the client system . The term " heterogeneous " is commonly used to describe an environment in which the client operating system and server...This is a Windows NT account in the preferred embodiment. At step 42, the NT user profile is retrieved and established at the client to enable the user to initialize a personal "desktop" and to implement certain access "preferences" at the client. The " user profile " (which normally differs from the "user account" described above) thus preferably includes, without limitation, a desktop definition and a set of preferences for the user. A user profile is created as the user changes appearance and preferences while using the client. Thus, for... now to FIG. 9, a flowchart is shown of a preferred routine for establishing a user profile at the client machine. This was step 42 in FIG. 4. By way of brief background, a "user profile " may be thought of as a collection of information that defines how a given user desires to view his or her relationship with the client machine. Thus, for example, the user profile may include the user's desktop representation (which is configurable through standard Windows interfaces) as...and retrieve them from an NT server, it does not have capability of retrieving a user profile from any other type of server.

The storage of a user profile may have been done previously, and the profile could be stored in a standard location...

...or in a location specified in the user's local NT user account. When the

user profile is stored in a standard location on the non-native server, specific commands (as described...

... that appropriate files are retrieved from the non-native server. Alternatively, the location of the user profile is uniquely specified for the user account. AS described in FIG. 11, a dynamically-created entered for the user's user profile .

Referring now to FIG. 9, the storage routine for entering a specific user profile path begins at step 91 with an administrator having administrative privilege logging into the client...

... of the server, "ShareName" is the share name, and "ProfileDir" is the location where the user profile is to be loaded during logon and saved at logonff. At step 101, the administrator...

...then closes the manager program.

Turning now to FIG. 10, the routine for retrieving the user profile is now described. It is assumed that there are a series of files and directories that makes up a user profile . The routine begins at step 96. A check is made to determine whether a specific...102. At step 98, a test is made to determine whether the user has a user profile he or she wishes to obtain from the server. If the outcome of the test at step 98 is negative, the routine branches to step 100 and uses a default user profile . If, however, the outcome of the test at step 98 is positive, the routine continues at step 102 to retrieve and utilize the user profile . At step 104, the user profile for the authenticated user is instantiated on the client. This completes the processing.

It is...

... has logged on, has been authenticated, has established a user account, downloaded his or her user profile , and performed some work on the client. When the user logs off, it is desirable...

... on from his or her "own" machine but may have modified his or her respective user profile . Or, the user may have added or deleted one or more authentication locations. Thus, the... users to initiate multiple network (server) connections as part of the logon process.

By supporting " user profiles ," the invention provides desktop and environment consistency. Instead of having a single user tied to...drivers are the modules that provide a set of common functions used by authentication, discovery, user profile storage and retrieval, logoff, dynamic user account creation, and dynamic user account management.

In particular...used for dynamic creation of users. The Logon function is used to store and retrieve user profiles . Additional details about these functions are now described.

Discovery

As noted above, the Primary Logon...and placed in the appropriate section based on the type.

Storage and retrieval of Windows user profiles from file systems other than native Windows NT is facilitated by the architecture described

above...

...to file systems other than a standard Windows NT based file system. More specifically, the user profiles are handled during the user logon (authentication) process. AS part of the processing of the WIxLoggedOutSAS() interface within the ibmgina module, the user profile location is determined and returned to the WinLogon module executing within the Windows NT client...

... to process each of the interface requests made to the ibmgina module. For handling of user profiles , the domain driver is responsible for returning the location of the user profile . The method required for determination of the location of the user profile will differ significantly based on the type of file system used to store the user profile . The WinLogon module requires the user profile to be in a location that can be accessed by standard file system code executing...

... differs from the Windows NT base file system, additional steps are typically required to support user profiles .

In the preferred embodiment of the invention, one of the authentication providers supported is an...

... specific domain driver exists for SMB Domains. To support the storage and retrieval of the user profiles from SMB servers, the domain driver implements the DrvLogon 0 interface. AS part of the DrvLogon processing within the domain driver, the user profile path is set in the WIxProfile location of the information returned from the WIxLoggedOutSAS() processing... has "maintained" the account on the local machine. If the account is "maintained" and a user profile path has been entered for the user account, that path will be set in the...

...to the path that is constructed.

When the WinLogon process receives this WIxProfile value, the user profile held in that location will be downloaded (if required) to the local Windows NT system. The WinLogon process will then be responsible for using the information in the user profile to ...users desktop and set any other preferences specified in the file. The processing of the user profile is the standard client system processing on Windows NT.

Other file systems would handle the user profile processing within their domain drivers. A domain driver that used Distributed File Systems (DFS) as...

...data may exist within those file systems and it may be desirable to hold the user profiles in this same file system.

Processing the WIxLogoff () interface will cause the user profiles to be stored. Again, the domain driver is responsible for handling this processing through implementation...
...7. The method as described in claim 1 further including the steps of:
retrieving a user profile for the authenticated user from the non-native server domain; and
establishing the user profile at the client.

8. The method as described in claim 7 wherein the user profile

includes a desktop configuration.

9. The method as described in claim 1 further including the...claim 12 further including the steps of:
retrieving from the non-native server domain a user profile ; and
establishing the user profile at the client.

14. The method as described in claim 12 further including the step... described in claim 18 further including means responsive to authentication for retrieving and establishing a user profile at the Windows ... wherein the authentication mechanism further includes means responsive to authentication for retrieving and establishing a user profile at the Windows NT client.

25. The computer as described in claim 23 wherein the...

1/2,AB,KWIC/5 (Item 2 from file: 654)
DIALOG(R)File 654:US Pat.Full.

02997186

Utility
DISCOVERY OF AUTHENTICATION SERVER DOMAINS IN A COMPUTER NETWORK

PATENT NO.: 5,948,064
ISSUED: September 07, 1999 (19990907)
INVENTOR(s): Bertram, Daniel Wayne, Cedar Park, TX (Texas), US (United States of America)
Dutcher, David Paul, Austin, TX (Texas), US (United States of America)
Lenharth, Scott Alan, Austin, TX (Texas), US (United States of America)
Rolette, Jr. James Michael, Round Rock, TX (Texas), US (United States of America)
Smith, Stanley Alan, Austin, TX (Texas), US (United States of America)
Spooner, Courtney Joseph, Austin, TX (Texas), US (United States of America)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company or Corporation), Armonk, NY (New York), US (United States of America)
[Assignee Code(s): 42640]
APPL. NO.: 8-888,554
FILED: July 07, 1997 (19970707)
U.S. CLASS: 709-225 cross ref: 309-229; 380-4; 380-25; 380-30; 713-202
INTL CLASS: [6] G06F 11-00; G06F 13-14
FIELD OF SEARCH: 380-4; 380-25; 380-30; 395-739; 395-187.1; 395-186; 713-202; 709-225; 709-229

References Cited

U.S. PATENT DOCUMENTS

5,202,921	4/1993	Herzberg et al.
5,218,697	6/1993	Chung
5,241,594	8/1993	Kung

5,349,643	9/1994	Cox et al.	
5,423,022	6/1995	Ackley	
5,455,953	10/1995	Russell	395-739
5,504,892	4/1996	Atsatt et al.	
5,530,758	6/1996	Marino, Jr. et al.	
5,548,726	8/1996	Pettus	
5,553,242	9/1996	Russell et al.	
5,586,260	12/1996	Hu	395-187.1
5,594,921	1/1997	Pettus	
5,655,077	8/1997	Jones et al.	395-187.1
5,684,950	11/1997	Dare et al.	713-202
5,706,349	1/1998	Aditham et al.	380-25
5,706,427	1/1998	Tabuki	713-202
5,737,523	4/1998	Callaghan et al.	709-225
5,764,887	6/1998	Kells et al.	395-186
5,764,890	6/1998	Glasser et al.	380-25
5,818,936	10/1998	Mashayekhi	380-25
5,841,970	11/1998	Tabuki	380-25

PRIMARY EXAMINER: Lim, Krisna
ATTORNEY, AGENT, OR FIRM: LaBaw, Jeffrey S.; Judson, David H.
CLAIMS: 21
EXEMPLARY CLAIM: 1
DRAWING PAGES: 6
DRAWING FIGURES: 15
ART UNIT: 278
FULL TEXT: 1181 lines

ABSTRACT

A method of discovering native or non-native authentication server domains in a computer network. The various domains are "discovered" by issuing requests from the client to one or more of the servers in the network. Each response is then characterized as being from a native or non-native server, and a list of each such server type is then compiled at the client. If desired, the administrator may then apply a discovery "policy" to tailor the way in which a user may access and interact with the discovered information.

...authentication of the user;

FIG. 9 is a flowchart illustrating a routine for establishing a user profile at the client;

FIG. 10 is a flowchart illustrating a preferred technique for establishing a user profile at the client machine;

FIG. 11 is a flowchart illustrating a "maintenance" routine according to

...

... to a database of account information retained at a given server that is running a heterogeneous operating system . A non-native server domain is supported on a non-native server. Thus, where the...This is a Windows NT account in the preferred embodiment. At step 42, the NT user profile is retrieved and established at the client to enable the user to initialize a personal "desktop" and to implement certain access "preferences" at the client. The " user profile " (which normally differs from the "user

account" described above) thus preferably includes, without limitation, a desktop definition and a set of preferences for the user. A user profile is created as the user changes appearance and preferences while using the client. Thus, for... now to FIG. 9, a flowchart is shown of a preferred routine for establishing a user profile at the client machine. This was step 42 in FIG. 4. By way of brief background, a "user profile " may be thought of as a collection of information that defines how a given user desires to view his or her relationship with the client machine. Thus, for example, the user profile may include the user's desktop representation (which is configurable through standard Windows interfaces) as of retrieving a user profile from any other type of server.

The storage of a user profile may have been done previously, and the profile could be stored in a standard location...
...or in a location specified in the user's local NT user account. When the user profile is stored in a standard location on the non-native server, specific commands are used...

... that appropriate files are retrieved from the non-native server. Alternatively, the location of the user profile is uniquely specified for the user account. As described in FIG. 11, a dynamically-created...

...system. When that is done, a specific path may be entered for the user's user profile .

Referring now to FIG. 9, the routine for entering a specific user profile path begins at step 91 with an administrator having administrative privilege logging into the client... of the server, "ShareName" is the share name, and "ProfileDir" is the location where the user profile is to be loaded during logon and saved at logonff. At step 101, the administrator...

...then closes the manager program.

Turning now to FIG. 10, the routine for retrieving the user profile is now described. It is assumed that there are a series of files and directories that makes up a user profile . The routine begins at step 96. A check is made to determine whether a specific...

...102. At step 98, a test is made to determine whether the user has a user profile he or she wishes to obtain from the server. If the outcome of the test at step 98 is negative, the routine branches to step 100 and uses a default user profile . If, however, the outcome of the ...step 98 is positive, the routine continues at step 102 to retrieve and utilize the user profile . At step 104, the user profile for the authenticated user is instantiated on the client. This completes the processing.

It is...

... has logged on, has been authenticated, has established a user account, downloaded his or her user profile , and performed some work on the client. When the user logs off, it is desirable...

... on from his or her "own" machine but may have modified his or her respective user profile . Or, the user may have added or deleted one or more authentication locations. Thus, the... users to initiate multiple

network (server) connections as part of the logon process.

By supporting " user profiles ," the invention provides desktop and environment consistency. Instead of having a single user tied to...drivers are the modules that provide a set of common functions used by authentication, discovery, user profile storage and retrieval, logoff, dynamic user account creation, and dynamic user account management.

In particular...used for dynamic creation of users. The Logon function is used to store and retrieve user profiles . Additional details about these functions are now described.

Discovery

As noted above, the Primary Logon...and placed in the appropriate section based on the type.

Storage and retrieval of Windows user profiles from file systems other than native Windows NT is facilitated by the architecture described above...to file systems other than a standard Windows NT based file system.

More specifically, the user profiles are handled during the user logon (authentication) process. AS part of the processing of the WIxLoggedOutSAS() interface within the ibmgina module, the user profile location is determined and returned to the WinLogon module executing within the Windows NT client...

... to process each of the interface requests made to the ibmgina module. For handling of user profiles , the domain driver is responsible for returning the location of the user profile . The method required for determination of the location of the user profile will differ significantly based on the type of file system used to store the user profile . The WinLogon module requires the user profile to be in a location that can be accessed by standard ...differs from the Windows NT base file system, additional steps are typically required to support user profiles .

In the preferred embodiment of the invention, one of the authentication providers supported is an...

... specific domain driver exists for SMB Domains. To support the storage and retrieval of the user profiles from SMB servers, the domain driver implements the DrvLogon () interface. As part of the DrvLogon processing within the domain driver, the user profile path is set in the WIxProfile location of the information returned from the WIxLoggedOutSAS() processing...

... has "maintained" the account on the local machine. If the account is "maintained" and a user profile path has been entered for the user account, that path will be set in the...to the path that is constructed.

When the WinLogon process receives this WIxProfile value, the user profile held in that location will be downloaded (if required) to the local Windows NT system. The WinLogon process will then be responsible for using the information in the user profile to create the users desktop and set any other preferences specified in the file. The processing of the user profile is the standard client system processing on Windows NT.

Other file systems would handle the user profile processing within their domain drivers. A domain driver that used Distributed File Systems (DFS) as...data may exist within those file systems and it may be desirable to hold the user profiles in this same file system.

Processing the WIxLogoff () interface will cause the user profiles to be stored. Again, the domain driver is responsible for handling this processing through implementation...

1/2,AB,KWIC/6 (Item 3 from file: 654)
DIALOG(R)File 654:US Pat.Full.

02961846

Utility
SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS PROTECTION

PATENT NO.: 5,915,019
ISSUED: June 22, 1999 (19990622)
INVENTOR(s): Ginter, Karl L., Beltsville, MD (Maryland), US (United States of America)
Shear, Victor H., Bethesda, MD (Maryland), US (United States of America)
Spahn, Francis J., El Cerrito, CA (California), US (United States of America)
Van Wie, David M., Sunnyvale, CA (California), US (United States of America)
ASSIGNEE(s): InterTrust Technologies Corp , (A U.S. Company or Corporation) , Sunnyvale, CA (California), US (United States of America)
APPL. NO.: 8-780,393
FILED: January 08, 1997 (19970108)

This is a divisional of application Ser. No. 08-388,107, filed Feb. 13, 1995, abandoned.

U.S. CLASS: 380-4 cross ref: 380-21; 380-49; 395-680; 705-26; 705-400
INTL CLASS: [6] H04L 9-00
FIELD OF SEARCH: 380-3; 380-4; 380-5; 380-21; 380-49; 395-680; 395-683; 705-26; 705-400

References Cited

U.S. PATENT DOCUMENTS

3,573,747	4/1971	Adams et al.
3,609,697	9/1971	Blevins
3,796,830	3/1974	Smith
3,798,359	3/1974	Feistel
3,798,360	3/1974	Feistel
3,798,605	3/1974	Feistel
3,806,882	4/1974	Clarke
3,829,833	8/1974	Freeny, Jr.
3,906,448	9/1975	Henriques
3,911,397	10/1975	Freeny, Jr.

3,924,065	12/1975	Freeny, Jr.
3,931,504	1/1976	Jacoby
3,946,220	3/1976	Brobeck et al.
3,956,615	5/1976	Anderson et al.
3,958,081	5/1976	Ehrsam et al.
3,970,992	7/1976	Boothroyd et al.
4,048,619	9/1977	Forman, Jr. et al.
4,071,911	1/1978	Mazur
4,112,421	9/1978	Freeny, Jr.
4,120,030	10/1978	Johnstone
4,163,280	7/1979	Mori et al.
4,168,396	9/1979	Best
4,196,310	4/1980	Forman et al.
4,200,913	4/1980	Kuhar et al.
4,209,787	6/1980	Freeny, Jr.
4,217,588	8/1980	Freeny, Jr.
4,220,991	9/1980	Hamano et al.
4,232,193	11/1980	Gerard
4,232,317	11/1980	Freeny, Jr.
4,236,217	11/1980	Kennedy
4,253,157	2/1981	Kirschner et al.
4,262,329	4/1981	Bright et al.
4,265,371	5/1981	Desai et al.
4,270,182	5/1981	Asija
4,278,837	7/1981	Best
4,305,131	12/1981	Best
4,306,289	12/1981	Lumley
4,309,569	1/1982	Merkle
4,319,079	3/1982	Best
4,323,921	4/1982	Guillou
4,328,544	5/1982	Baldwin et al.
4,337,483	6/1982	Guillou
4,361,877	11/1982	Dyer et al.
4,375,579	3/1983	Davida et al.
4,433,207	2/1984	Best
4,434,464	2/1984	Suzuki et al.
4,442,486	4/1984	Mayer
4,446,519	5/1984	Thomas
4,454,594	6/1984	Heffron et al.
4,458,315	7/1984	Uchenick
4,462,076	7/1984	Smith, III
4,462,078	7/1984	Ross
4,465,901	8/1984	Best
4,471,163	9/1984	Donald et al.
4,484,217	11/1984	Block et al.
4,494,156	1/1985	Kadison et al.
4,513,174	4/1985	Herman
4,528,588	7/1985	Lofberg
4,528,643	7/1985	Freeny, Jr.
4,553,252	11/1985	Egendorf
4,558,176	12/1985	Arnold et al.
4,558,413	12/1985	Schmidt et al.
4,562,306	12/1985	Chou et al.
4,562,495	12/1985	Bond et al.
4,577,289	3/1986	Comerford et al.
4,584,641	4/1986	Guglielmino
4,588,991	5/1986	Atalla

4,589,064	5/1986	Chiba et al.	
4,593,353	6/1986	Pickholtz	
4,593,376	6/1986	Volk	
4,595,950	6/1986	Lofberg	
4,597,058	6/1986	Izumi et al.	
4,634,807	1/1987	Chorley et al.	
4,644,493	2/1987	Chandra et al.	
4,646,234	2/1987	Tolman et al.	
4,652,990	3/1987	Pailen et al.	
4,658,093	4/1987	Hellman	
4,670,857	6/1987	Rackman	
4,672,572	6/1987	Alsberg	
4,677,434	6/1987	Fascenda	
4,680,731	7/1987	Izumi et al.	
4,683,553	7/1987	Mollier	
4,685,056	8/1987	Barnsdale et al.	
4,688,169	8/1987	Joshi	
4,691,350	9/1987	Kleijne et al.	
4,696,034	9/1987	Wiedemer	
4,701,846	10/1987	Ikeda et al.	
4,712,238	12/1987	Gilhousen et al.	
4,713,753	12/1987	Boebert et al.	380-4
4,740,890	4/1988	William	
4,747,139	5/1988	Taaffe	
4,757,533	7/1988	Allen et al.	
4,757,534	7/1988	Matyas et al.	
4,768,087	8/1988	Taub et al.	
4,791,565	12/1988	Dunham et al.	
4,796,181	1/1989	Wiedemer	
4,799,156	1/1989	Shavit et al.	
4,807,288	2/1989	Ugon et al.	
4,817,140	3/1989	Chandra et al.	
4,823,264	4/1989	Deming	
4,827,508	5/1989	Shear	
4,858,121	8/1989	Barber et al.	
4,864,494	9/1989	Kobus	
4,868,877	9/1989	Fischer	
4,903,296	2/1990	Chandra et al.	
4,924,378	5/1990	Hershey et al.	
4,930,073	5/1990	Cina, Jr.	
4,949,187	8/1990	Cohen	
4,977,594	12/1990	Shear	
4,999,806	3/1991	Chernow et al.	
5,001,752	3/1991	Fischer	
5,005,122	4/1991	Griffin et al.	
5,005,200	4/1991	Fischer	
5,010,571	4/1991	Katznelson	380-4
5,023,907	6/1991	Johnson et al.	380-4
5,047,928	9/1991	Wiedemer	
5,048,085	9/1991	Abraham et al.	
5,050,213	9/1991	Shear	
5,091,966	2/1992	Bloomberg et al.	
5,103,392	4/1992	Mori	
5,103,476	4/1992	Waite et al.	
5,111,390	5/1992	Ketcham	
5,119,493	6/1992	Janis et al.	
5,128,525	7/1992	Stearns et al.	

5,136,643	8/1992	Fischer	
5,136,646	8/1992	Haber et al.	
5,136,647	8/1992	Haber et al.	
5,136,716	8/1992	Harvey et al.	
5,146,575	9/1992	Nolan, Jr.	
5,148,481	9/1992	Abraham et al.	
5,155,680	10/1992	Wiedemer	
5,168,147	12/1992	Bloomberg	
5,185,717	2/1993	Mori	
5,201,046	4/1993	Goldberg et al.	
5,201,047	4/1993	Maki et al.	
5,208,748	5/1993	Flores et al.	
5,214,702	5/1993	Fischer	
5,216,603	6/1993	Flores et al.	
5,221,833	6/1993	Hecht	
5,222,134	6/1993	Waite et al.	
5,224,160	6/1993	Paulini et al.	
5,224,163	6/1993	Gasser et al.	
5,235,642	8/1993	Wobber et al.	
5,245,165	9/1993	Zhang	
5,247,575	9/1993	Sprague et al.	
5,260,999	11/1993	Wyman	
5,263,158	11/1993	Janis	395-600
5,265,164	11/1993	Matyas et al.	
5,276,735	1/1994	Boebert et al.	
5,280,479	1/1994	Mary	
5,285,494	2/1994	Sprecher et al.	
5,301,231	4/1994	Abraham	
5,311,591	5/1994	Fischer	380-4
5,319,705	6/1994	Halter et al.	
5,337,360	8/1994	Fischer	
5,341,429	8/1994	Stringer et al.	
5,343,527	8/1994	Moore	
5,347,579	9/1994	Blandford	
5,351,293	9/1994	Michener et al.	
5,355,474	10/1994	Thuraisngham et al.	
5,373,561	12/1994	Haber et al.	
5,390,247	2/1995	Fischer	380-25
5,390,330	2/1995	Talati	
5,392,220	2/1995	van den Hamer et al.	
5,392,390	2/1995	Crozier	
5,394,469	2/1995	Nagel et al.	
5,410,598	4/1995	Shear	
5,412,717	5/1995	Fischer	
5,421,006	5/1995	Jablon	
5,422,953	6/1995	Fischer	
5,428,606	6/1995	Moskowitz	
5,438,508	8/1995	Wyman	380-4
5,442,645	8/1995	Ugon	
5,444,779	8/1995	Daniele	
5,449,895	9/1995	Hecht et al.	
5,449,896	9/1995	Hecht et al.	
5,450,493	9/1995	Maher	
5,453,601	9/1995	Rosen	
5,453,605	9/1995	Hecht et al.	
5,455,407	10/1995	Rosen	
5,455,861	10/1995	Faucher et al.	

5,455,953	10/1995	Russell	
5,457,746	10/1995	Dolphin	
5,463,565	10/1995	Cookson et al.	
5,473,687	12/1995	Lipscomb et al.	
5,473,692	12/1995	Davis	
5,479,509	12/1995	Ugon	
5,485,622	1/1996	Yamaki	
5,491,800	2/1996	Goldsmith et al.	
5,497,479	3/1996	Hornbuckle	
5,497,491	3/1996	Mitchell et al.	
5,499,298	3/1996	Narasimhalu et al.	
5,504,757	4/1996	Cook et al.	
5,504,818	4/1996	Okano	380-49
5,504,837	4/1996	Griffeth et al.	
5,508,913	4/1996	Yamamoto et al.	
5,509,070	4/1996	Schull	380-4
5,513,261	4/1996	Maher	
5,530,235	6/1996	Stefik et al.	
5,530,752	6/1996	Rubin	
5,533,123	7/1996	Force et al.	
5,534,975	7/1996	Stefik et al.	
5,537,526	7/1996	Anderson et al.	
5,539,735	7/1996	Moskowitz	
5,539,828	7/1996	Davis	
5,550,971	8/1996	Brunner et al.	
5,553,282	9/1996	Parrish et al.	
5,557,518	9/1996	Rosen	364-408
5,563,946	10/1996	Cooper et al.	380-4
5,568,552	10/1996	Davis	
5,572,673	11/1996	Shurts	
5,592,549	1/1997	Nagel et al.	
5,606,609	2/1997	Houser et al.	380-4
5,613,004	3/1997	Cooperman et al.	
5,621,797	4/1997	Rosen	
5,629,980	5/1997	Stefik et al.	
5,633,932	5/1997	Davis et al.	
5,634,012	5/1997	Stefik et al.	
5,636,292	6/1997	Rhoads	
5,638,443	6/1997	Stefik et al.	380-4
5,638,504	6/1997	Scott et al.	
5,640,546	6/1997	Gopinath et al.	
5,655,077	8/1997	Jones et al.	
5,687,236	11/1997	Moskowitz et al.	
5,689,587	11/1997	Bender et al.	
5,692,180	11/1997	Lee	
5,710,834	1/1998	Rhoads	
5,740,549	4/1998	Reilly et al.	
5,745,604	4/1998	Rhoads	
5,748,763	5/1998	Rhoads	
5,748,783	5/1998	Rhoads	
5,748,960	5/1998	Fischer	395-683
5,754,849	5/1998	Dyer et al.	
5,757,914	5/1998	McManis	
5,758,152	5/1998	LeTourneau	
5,765,152	1/1998	Erickson	
5,768,426	6/1998	Rhoads	

NON-U.S. PATENT DOCUMENTS

9 004 79	12/1984	BE (Belgium)
84 441	7/1983	EP (European Patent Office)
128672	12/1984	EP (European Patent Office)
A0135422	3/1985	EP (European Patent Office)
180460	5/1986	EP (European Patent Office)
370 146	11/1988	EP (European Patent Office)
399822A2	11/1990	EP (European Patent Office)
421409A2	4/1991	EP (European Patent Office)
456 386 A2	11/1991	EP (European Patent Office)
469 864 A2	2/1992	EP (European Patent Office)
565 314 A2	10/1993	EP (European Patent Office)
593 305 A2	4/1994	EP (European Patent Office)
651 554 A1	5/1995	EP (European Patent Office)
668 695 A2	8/1995	EP (European Patent Office)
725 376	1/1996	EP (European Patent Office)
696 798 A1	2/1996	EP (European Patent Office)
695 985 A1	2/1996	EP (European Patent Office)
715247A1	6/1996	EP (European Patent Office)
715246A1	6/1996	EP (European Patent Office)
715245A1	6/1996	EP (European Patent Office)
715244A1	6/1996	EP (European Patent Office)
715243A1	6/1996	EP (European Patent Office)
749081A1	12/1996	EP (European Patent Office)
778 513 A2	6/1997	EP (European Patent Office)
795 873 A2	9/1997	EP (European Patent Office)
3803982A1	1/1990	DE (Germany)
57-726	5/1982	JP (Japan)
62-241061	10/1987	JP (Japan)
1-068835	3/1989	JP (Japan)
64-68835	3/1989	JP (Japan)
2-242352	9/1990	JP (Japan)
2-247763	10/1990	JP (Japan)
2-294855	12/1990	JP (Japan)
4-369068	12/1992	JP (Japan)
5-181734	7/1993	JP (Japan)
5-257783	10/1993	JP (Japan)
5-268415	10/1993	JP (Japan)
6-175794	6/1994	JP (Japan)
6225059	8/1994	JP (Japan)
6-215010	8/1994	JP (Japan)
7-084852	3/1995	JP (Japan)
7-056794	3/1995	JP (Japan)
7-141138	6/1995	JP (Japan)
7-200492	8/1995	JP (Japan)
7-200317	8/1995	JP (Japan)
7-244639	9/1995	JP (Japan)
8-137795	5/1996	JP (Japan)
8-152990	6/1996	JP (Japan)
8-185298	7/1996	JP (Japan)
A2136175	9/1984	GB (United Kingdom)
2264796	9/1993	GB (United Kingdom)
2294348	4/1996	GB (United Kingdom)
2295947	6/1996	GB (United Kingdom)
WOA8502310	5/1985	WO (World Intellectual Property Org)
WO 85-03584	8/1985	WO (World Intellectual Property Org)

WO 90-02382	3/1990	WO (World Intellectual Property Org)
WO92-06438	4/1992	WO (World Intellectual Property Org)
WO92-22870	12/1992	WO (World Intellectual Property Org)
WO93-01550	1/1993	WO (World Intellectual Property Org)
WO94-01821	1/1994	WO (World Intellectual Property Org)
WO94-03859	2/1994	WO (World Intellectual Property Org)
WO9406103	3/1994	WO (World Intellectual Property Org)
WO 94-16395	7/1994	WO (World Intellectual Property Org)
WO 94-18620	8/1994	WO (World Intellectual Property Org)
WO 94-22266	9/1994	WO (World Intellectual Property Org)
WO 94-27406	11/1994	WO (World Intellectual Property Org)
WO95-14289	6/1995	WO (World Intellectual Property Org)
WO 96-00963	1/1996	WO (World Intellectual Property Org)
WO 96-06503	2/1996	WO (World Intellectual Property Org)
WO 96-03835	2/1996	WO (World Intellectual Property Org)
WO 96-05698	2/1996	WO (World Intellectual Property Org)
WO96-13013	5/1996	WO (World Intellectual Property Org)
WO96-21192	7/1996	WO (World Intellectual Property Org)
WO97-03423	1/1997	WO (World Intellectual Property Org)
WO97-07656	3/1997	WO (World Intellectual Property Org)
WO97-32251	9/1997	WO (World Intellectual Property Org)
WO 97-48203	12/1997	WO (World Intellectual Property Org)

OTHER REFERENCES

Applications Requirements for Innovative Video Programming; How to Foster (or Cripple) Program Development Opportunities for Interactive Video Programs Delivered on Optical Media; A Challenge for the Introduction of DVD (Digital Video Disc) (Oct. 19-20, 1995, Sheraton Universal Hotel, Universal City CA).

Arneke, David, et al., News Release, AT&T, Jan. 9, 1995, AT&T encryption system protects information services, 1 page.

AT&T Technology, vol. 9, No. 4, New Products, Systems and Services, pp. 16-19, Undated.

Barassi, Theodore Sedgwick, Esq., The Cybernotary: Public Key Registration and Certificaiton and Authentication of International Legal Transactions, 4 pages, Undated.

Bruner, Rick E., PowerAgent, NetBot help advertisers reach Internet shoppers, Aug. 1997 (Document from Internet).

CD ROM, Introducing . . . The Workflow CD-ROM Sampler, Creative Networks, MCIMail: Creative Networks, Inc., Palo Alto, California, Undated.

Clark, Tim, Ad service gives cash back, www.news.com, Aug. 4, 1997, 2 pages (Document from Internet).

Communications of the ACM, Jun. 1996, vol. 39, No. 6.

Cunningham, Donna, et al., News Release, AT&T, Jan. 31, 1995, AT&T, VLSI Technology join to improve info highway security, 3 pages.

Data Sheet, About the Digital Notary Service, Surety Technologies, Inc.,

1994-95, 6 pages.

Dempsey, et al., D- Lib Magazine, Jul./Aug. 1996 The Warwick Metadata Workshop: A Framework for the Deployent of Resource Description, Jul. 15, 1966.

Document from Internet, cgi
ncsa.uiuc.edu, CGI Common Gateway Interface, 1 page, 1996.

Firefly Network, Inc., www.ffly.com, What is Firefly? Firefly revision: 41.4 Copyright 1995, 1996.

Gleick, James, "Dead as a Dollar" The New York Times Magazine, Jun. 16, 1996, Section 6, pp. 26-30, 35, 42, 50, 54.

Greguras, Fred, Softic Symposium '95, Copyright Clearances and Moral Rights, Nov. 30, 1995 (as updated Dec. 11, 1995), 3 pages.

Harman, Harry H., Modern Factor Analysis, Third Edition Revised, University of Chicago Press Chicago and London, Third revision published 1976.

Herzberg, Amir et al., Public Protection of Software, ACM Transactions on Computer Systems, vol. 5, No. 4, Nov. 1987, pp. 371-393.

Holt, Stannie, Start-up promises user confidentiality in Web marketing service, Info World Electric, Aug. 13, 1997 (Document from Internet).

Hotjava(tm) : The Security Story, 4 pages, Undated.

Invoice? What is an Invoice? Business Week, Jun. 10, 1996.

Javasoft, Frequently Asked Questions--Applet Security, What's Java(tm) ? Products and Services, Java/Soft News, Developer's Cornier,Jun. 7, 1996, 8 pages.

Jiang, et al, A concept-Based Approach to Retrieval from an Electronic Industrialn Directory, International Journal of Electronic Commerce, vol. 1, No. 1, Fall 1996, pp. 51-72.

Jones, Debra, Top Tech Stories, PowerAgent Introducts First Internet Infomediary to Empower and Protect Consumers, Aug. 13, 1997 3 pages (Document from Internet).

Kohntopp, M., Sag's durch die Blume, Apr. 1996, marit
schulung.netuse.de.

Lagoze, Carl, D-Lib Magazine, Jul./Aug. 1996, The Warwick Framework, A Container Architecture for Diverse Sets of Metadata.

Maclachlan, Malcolm, PowerAgent Debuts Spam-Free Marketing, TechWire, Aug. 13, 1997, 3 pages (Document from Internet), Undated.

Milbrandt, E., Stenanography Info and Archive, 1996.

Mossberg, Walter S., Personal Technology, Threats to Privacy On-Line Become More Worrisome, Wall Street Journal, Oct. 24, 1996.

Negroponte, Electronic Word of Mouth, Wired Oct. 1996, p. 218.

News Release, Premenos Announces Templar 2.0--Next Generation Software for Secure Internet EDI, webmaster
templar.net, 1 page, Jan. 17, 1996.

News Release, The Document Company Xerox, Xerox Announces Software Kit for Creating Working Documents with Dataglyphs, Nov. 6, 1995, Minneapolis, MN, 13 pages.

PowerAgent Inc., Proper Use of Consumer Information on the Internet White Paper, Jun. 1997, Document from Internet, 9 pages (Document from Internet).

PowerAgent Press Releases, What the Experts are Reporting on PowerAgent, Aug. 13, 1997, 6 pages (Document from Internet).

PowerAgent Press Releases, What the Experts are Reporting on PowerAgent, Aug. 4, 1997, 5 pages (Document from Internet).

PowerAgent Press Releases, What the Experts are Reporting on PowerAgent, Aug. 13, 1997, 3 pages (Document from Internet).

Premenos Corp. White Paper: The Future of Electronic Commerce, A Supplement to Midrange Systems, Internet webmaster
premenos.com, 4 pages, Undated.

Resnick, et al., Recommender Systems, Communications of the ACM, vol. 40, No. 3, Mar. 1997,pp. 56-89.

Rothstein, Edward, The New York Times, Technology, Connections, Making th eInternet come to you, through `push` technology . . . p. D5, Jan. 20, 1997.

Rutkowski, Ken, PowerAgent Introduces First Internet `Infomediary` to Empower and Protect Consumers, Tech Talk News Story, Aug. 4, 1997 (Document from Internet).

Sager, Ira (Edited by), Bits & Bytes, Business Week, Sep. 23, 1996, p. 142E.

Schurmann, Jurgen, Pattern Classification, A Unified View of Statistical and Neural Approaches, John Wiley & Sons, Inc., 1996.

Special Report, The Internet:Fulfilling the Promise The Internet: Bring Order From Chaos; Lynch, Clifford, Search the Internet; Resnick, Paul, Filtering Information on the Internet; Hearst, Marti A., Interfaces for Searching the Web; Stefik, Mark, Trusted Systems; Scientific American, Mar. 1997, pp. 49-56, 62-64, 68-72, 78-81.

Stefik, Mark, Introduction to Knowledge Systems, Chapter 7, Classification, pp. 543-607, 1995 by Morgan Kaufmann Publishers, Inc.

Templar Overview,: Premenos, Internet info
templar.net, 4 pages, Undated.

Templar Software and Services: Secure, Reliable, Standards-Based EDI Over the Internet, Prementos, Internet info

templar.net, 1 page, Undated.

Voight, Joan, Beyond the Banner, Wired, Dec. 1996, pp. 196, 200, 204.

Vonder Haar, Steven, PowerAgent Launches Commercial Service, Inter ctive Week, Aug. 4, 1997 (Document from Internet).
Weber, Dr. Robert, Digital Rights Management Technologies, A Report to the International Federation of Reproduction Rights Organisations, Oct. 1995,pp. 1-49.

Weber, Dr. Robert, Digital Rights Management Technologies, Oct. 1995, 21 pages.

Wepin Store, Stenography (Hidden Writing) (Common Law 1995).

World Wide Web FAQ, How can I put an access counter on my home page?, 1 page, 1996.

Yellin, F. Low Level Security in Java, 8 pages, Undated.

IBM Technical Disclosure Bulletin, "Multimedia Mixed Object Envelopes Supporting a Graduated Fee Scheme via Encryption," vol. 37, No. 03, Mar. 1994, Armonk, NY.

IBM Technical Disclosure Bulletin, "Transformer Rules for Software Distribution Mechanism-Support Products," vol. 37, No. 04B, Apr. 1994, Armonk, NY.
Suida, Karl, Mapping New Applications onto New Technologies, "Security Services in Telecommunications Networks," Mar. 8-10, 1988, Zurich.

Portland Software's ZipLock, Internet information, Copyright Portland Software 1996-1997, 12 pages.

Dyson, Esther, "Intellectual Value," Wired Magazine, Jul. 1995, pp. 136-141 and 182-184.

Argent Information Q&A Sheet, http://www.digital-watermark.com/, Copyright 1995, The Dice Company, 7 pages.

Guillou, L.: "Smart Cards and Conditional Access", pp. 480-490 Advances in Cryptography, Proceedings of EuroCrypt 84 (Beth et al, Ed., Springer-Verlag 1985).

Rankine, G., "Thomas--A Complete Single-Chip RSA Device," Advances in Cryptography, Proceedings of Crypto 86, pp. 480-487 (A.M. Odlyzko Ed., Springer-Verlag 1987).

DSP56000/DSP56001 Digital Signal Processor User's Manual, Motorola, 1990, p. 2-2.

Dusse, Stephen R. and Burton S. Kaliski "A Cryptographic Library for the Motorola 56000" in Damgard, I. M., Advances in Cryptology--Proceedings Eurocrypt 90, Springer-Verlag, 1991, pp. 230-244.

Struif, Bruno "The Use of Chipcards for Electronic Signatures and Encryption" in : Proceedings for the 1989 Conference on VSLI and Computer Peripherals, IEEE Computer Society Press, 1989, pp. 4/155-4/158.

Ryoichi Mori and Masaji Kawahara, The Transactions of the EIEICE, V. "Superdistribution: The Concept and the Architecture," E73 (Jul. 1990), No. 7, Tokyo, Japan.

Stefik, "Internet Dreams: Archetypes, Myths, and Metaphors, Letting Loose the Light: Igniting Commerce in Electronic Publication," pp. 219-253, (1996) Massachusetts Institute of Technology.

Stefik, Mark, "Letting Loose the Light, Igniting Commerce in Electronic Publication," (1994, 1995) Palo Alto, California.

Shear, "Solutions for CD-ROM Pricing and Data Security Problems", pp. 530-533, CD ROM Yearbook 1988-1989 (Microsoft Press 1988 or 1989).

Press Release, "National Semiconductor and EPR Partner For Information Metering/Data Security Cards" (Mar. 4, 1994).

"Electronic Publishing Resources Inc. Protecting Electronically Published Properties Increasing Publishing Profits" (Electronic Publishing Resources, 1991).

"The Benefits of ROI For Database Protection and Usage Based Billing" (Personal Library Software, 1987 or 1988).

ROI-Solving Critical Electronic Publishing Problems (Personal Library Software, 1987 or 1988).

Weber, "Metering Technologies for Digital Intellectual Property, A Report to the International Federation of Reproduction Rights Organisations," pp. 1-29; Oct. 1994, Boston, MA, USA.

ROI (Personal Library Software, 1987 or 1988).

DiscStore (Electronic Publishing Resources 1991).
Yee, "Using Secure Coprocessors," CMU-CS-94-149, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA 15213, Undated.

Tygar et al., "Dyad: A System for Using Physically Secure Coprocessors," School of Computer Science, Carnegie Mellon University, Pittsburgh, PA 15213 (undated).

Tygar et al., "Dyad: A System for Using Physically Secure Coprocessors," School of Computer Science, Carnegie Mellon University, Pittsburgh, PA 15213 (May 1991).

Maxemchuk, "Electronic Document Distribution," AT&T Bell Laboratories, Murry Hill, New Jersey 07974, Undated.

Choudhury, et al., "Copyright Protection for Electronic Publishing over Computer Networks," AT&T Bell Laboratores, Murray Hill, New Jersey 07974 (Jun. 1994).

Weingart, "Physical Security for the mu ABYSS System," IBM Thomas J. Watson Research Center, Yorktown Heights, New York 10598 (1987).

White, "ABYSS: A Trusted Architecture for Software Protection," IBM Thomas

J. Watson Research Center, Yorktown Heights, New York 10598 (1987).

Neumann, et al., "A Provably Secure Operating System: The System, Its Applications, and Proofs," Computer Science Laboratory Report CSL-116, Second Edition, SRI International (May 1980).

Caruso, "Technology, Digital Commerce 2 plans for watermarks, which can bind proof of authorship to electronic works," New York Times (Aug. 1995).

"Electronic Currency Requirements, XIWT (Cross Industry Working Group)," no date.

"NII, Architecture Requirements, XIWT," no date.

Arthur K. Reilly, Standards committee T1-Telecommunications, Input to the International Telecommunications Hearings, Panel 1: Component Technologies of the NII/GII, no date.

Dan Bart, Comments in the Matter of Public Hearing and Request for Comments on the International Aspects of the National Information Infrastructure, Aug. 12, 1994.
"Open System Environment Architectural Framework for National Information Infrastructure Services and Standards, in Support of National Class Distributed Systems," Distributed System Engineering Program Sponsor Group, Draft 1 slashed zero Aug. 5, 1994.

"Information Infrastructure Standards Panel: NII The Information Superhighway," NationsBank--HGDeal--ASC X9, 15 pages, Undated.

Jud Hofmann, "Interfacing the NII to User Homes," Electronic Industries Association, Consumer Electronic Bus Committee, 14 slides, no date.

"Framework for National Information Infrastructure Services," NIST, Jul. 1994, 12 slides.

Claude Baggett, "Cable's Emerging Role in the Information Superhighway," Cable Labs, 13 slides, Undated.

"IISP Break Out Session Report for Group No. 3, Standards Development and Tracking System," no date.

"XIWT Cross Industry Working Team," 5 pages, Jul. 1994.
"Computer Systems Policy Project (CSSP), Perspectives on the National Information Infrastructure: Ensuring Interoperability (Feb. 1994)," Feb. 1994.

"Framework for National Information Infrastructure Services," Draft, U.S. Department of Commerce, Jul. 1994.

"EIA and TIA White Paper on National Information Infrastructure,"published by the Electronic Industries Association and the Telecommunications Industry Association, Washington, D.C., no date.

Michael Baum, "Worldwide Electronic Commerce: Law, Policy and Controls Conference," program details, Nov. 11, 1993.

Bruce Sterling, "Literary freeware: Not for Commercial Use," remarks at

Computers, Freedom and Privace Conference IV, Chicago, Mar. 26, 1994.

"The 1:1 Future of the Electronic Marketplace: Return to a Hunting and Gathering Society," 2 pages, no date.

D. Linda Garcia, testimony before a hearing on science, space and technology, May 26, 1994.

Wired 1.02, "Is Advertising Really dead?, Part 2," 1994.

Hugh Barnes, memo to Henry LaMuth, subject: George Gilder articles, May 31, 1994.

Daniel J. Weitzner, A Statement on EFF's Open Platform Campaign as of Nov., 1993, 3 pages.

"Serving the Community: A Public-Interest Vision of the National Information Infrastructure," Computer Professionals for Social Responsibility, Executive Summary, no date.

Steven Schlossstein, International Economy, "America: The G7's Comeback Kid," Jun./Jul. 1993.

Lance Rose, "Cyberspace and the Legal Matrix: Laws or Confusion?," 1991.

"Cable Television and America's Telecommunications Infrastructure," National Cable Television Association, Apr. 1993.

Adele Weder, "Life on the Infohighway," 4 pages, no date.

T. Valovic, Telecommunications, "The Role of Computer Networking in the Emerging Virtual Marketplace," pp. 40-44, Undated.

Dr. Joseph N. Pelton, Telecommunications, "Why Nicholas Negroponte is Wrong About the Future of Telecommunication," pp. 35-40, Jan. 1993.

Nicholas Negroponte, Telecommunications, "Some Thoughts on Likely and expected Communications scenarios: A Rebuttal," pp. 41-42, Jan. 1993.

Tom Stephenson, Advanced Imaging, "The Info Infrastructure Initiative: Data SuperHighways and You," pp. 73-74, May 1993.

Steve Rosenthal, New Media, "Mega Channels," pp. 36-46, Sep. 1993.

News Release, The White House, Office of the President, "Background on the Administration's Telecommunications Policy Reform Initiative," Jan. 11, 1994.

Steve Rosenthal, New Media, "Interactive Network: Viewers Get Involved," pp. 30-31, Dec. 1992.
Steve Rosenthal, New Media, "Interactive TV: The Gold Rush Is On," pp. 27-29, Dec. 1992.

EFFector Online vol. 6 No. 6, "A Publication of the Electronic Frontier Foundation," 8 pages, Dec. 6, 1993.

Mike Lanza, electronic mail, "George Gilder's Fifth Article--Digital

Darkhorse--Newspapers," Feb. 21, 1994.

Steven Levy, Wired, "E-Money, That's What I Want," 10 pages, Dec. 1994.

Kevin Kelly, Whole Earth Review, "E-Money,"pp. 40-59, Summer 1993.

Green paper, "Intellectual Property and the National Information Infrastructure, a Preliminary Draft of the Report of the Working Group on Intellectual Property Rights," Jul. 1994.

Communications of the ACM, "Intelligent Agents," Jul. 1994, vol. 37, No. 7.

"Encapsulation: An Approach to Operating System Security," Bisbey, II et al., Oct. 1973, pp. 666-675.
"Encryption Methods in Data Networks," Blom et al., Ericsson Technics, No. 2, 1978, Stockholm, Sweden.

First CII Honeywell Bull International Symposium on Computer Security and Confidentiality, Jan. 26-28, 1981, Conference Text, pp. 1-21.

Codercard, Spec Sheet--Basic Coder Subsystem, No date given.

"Micro Card"--Micro Card Technologies, Inc., Dallas, Texas, No date given.

"A Method of Software Protection Based on the Use of Smart Cards and Cryptographic Techniques," Scnaumueller-Bichl et al., No date given.

I "The New Alexandria" No. 1, Alexandria Institute, pp. 1-12, Jul.-Aug. 1986.

Denning et al., "Data Security," 11 Computing Surveys No. 3, Sep. 1979.

Kent, "Protecting Externally Supplied Software In Small Computers" (MIT/LCS/TR-255 Sep. 1980).

Proceedings of the IEEE, vol. 67, No. 3, Mar. 1979, "Privacy and Authentication: An Introduction to Cryptography," Whitfield Diffie and Martin E. Hellman, pp. 397-427.

Digest of Papers, VLSI: New Architectural Horizons, Feb. 1980, "Preventing Software Piracy With Crypto-Microprocessors," Robert M. Best, pp. 466-469.

IEEE Transactions on Information Theory, vol. 22, No. 6, Nov. 1976, "New Directions in Cryptography," Whitfield Diffie and Martin E. Hellman, pp. 644-651.

Low, et al., "Anonymous Credit Cards," AT&T Bell Laboratories, Proceedings of the 2nd ACM Conference on Computer and Communication Security, Fairfax, Virginia, Nov. 2-4, 1994.

Tygar et al., "Cryptography: It's Not Just For Electronic Mail Anymore," CMU-CS-93-107, School of Computer Science Carnegie Mellon University, Pittsburgh, Pennsylvania, Mar. 1, 1993.

Smith, et al., "Signed Vector Timestamps: A Secure Protocol for Partial Order Time," CMU-93-116, School of Computer Science Carnegie Mellon University, Pittsburgh, Pennsylvania, Oct. 1991; version of Feb. 1993.

Kristol et al., "Anonymous Internet Mercantile Protocol," AT&T Bell Laboratories, Murray Hill, New Jersey, Draft: Mar. 17, 1994.

Low et al., "Document Marking and Identification using both Line and Word Shifting," AT&T Bell Laboratories, Murray Hill, New Jersey, Jul. 29, 1994.

Low et al., "Anonymous Credit Cards and its Collusion Analysis," AT&T Bell Laboratories, Murray Hill, New Jersey, Oct. 10, 1994.

PRIMARY EXAMINER: Barron, Jr., Gilberto
ATTORNEY, AGENT, OR FIRM: Nixon & Vanderhye P.C.
CLAIMS: 101
EXEMPLARY CLAIM: 1
DRAWING PAGES: 146
DRAWING FIGURES: 155
ART UNIT: 276
FULL TEXT: 18428 lines

ABSTRACT

The present invention provides systems and methods for secure transaction management and electronic rights protection. Electronic appliances such as computers equipped in accordance with the present invention help to ensure that information is accessed and used only in authorized ways, and maintain the integrity, availability, and/or confidentiality of the information. Such electronic appliances provide a distributed virtual distribution environment (VDE) that may enforce a secure chain of handling and control, for example, to control and/or meter or otherwise monitor use of electronically stored or disseminated information. Such a virtual distribution environment may be used to protect rights of various participants in electronic commerce and other electronic or electronic-facilitated transactions. Distributed and other operating systems, environments and architectures, such as, for example, those using tamper-resistant hardware-based processors, may establish security at each node. These techniques may be used to support an all-electronic information distribution, for example, utilizing the "electronic highway."

... be used for supporting electronic currency, billing, payment and credit related activities, and/ or for user profile analysis and/or broader market survey analysis and marketing (consolidated) list generation or other information...depending on user selected currency). Such usage can be metered while an additional audit for user profile purposes can be prepared recording the identity of each filed displayed. Additionally, further metering can...
... to the remainder of the operating system. Such modularization and standardized interfacing permits different vendors/ operating system programmers to create different

02936057
Utility
SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS

PROTECTION

PATENT NO.: 5,892,900
ISSUED: April 06, 1999 (19990406)
INVENTOR(s): Ginter, Karl L., Beltsville, MD (Maryland), US (United States of America)
Shear, Victor H., Bethesda, MD (Maryland), US (United States of America)
Sibert, W. Olin, Lexington, MA (Massachusettes), US (United States of America)
Spahn, Francis J., El Cerrito, CA (California), US (United States of America)
Van Wie, David M., Sunnyvale, CA (California), US (United States of America)
ASSIGNEE(s): InterTrust Technologies Corp , (A U.S. Company or Corporation) , Sunnyvale, CA (California), US (United States of America)
APPL. NO.: 8-706,206
FILED: August 30, 1996 (19960830)
U.S. CLASS: 395-186 cross ref: 395-184.01
INTL CLASS: [6] G06F 11-00
FIELD OF SEARCH: 395-186; 395-187.1; 395-188.1; 395-218; 395-200.59; 380-4; 380-25; 380-30; 380-825.31; 380-825.34

References Cited

U.S. PATENT DOCUMENTS

3,573,747	4/1971	Adams et al.	73-862.58
3,609,697	9/1971	Blevins	395-407
3,796,830	3/1974	Smith	380-37
3,798,359	3/1974	Feistel	380-37
3,798,360	3/1974	Feistel	380-37
3,798,605	3/1974	Feistel	380-25
3,806,882	4/1974	Clarke	711-164
3,829,833	8/1974	Freeny, Jr.	340-825.31
3,906,448	9/1975	Henriques	235-438
3,911,397	10/1975	Freeny, Jr.	235-382
3,924,065	12/1975	Freeny, Jr.	375-27A
3,931,504	1/1976	Jacoby	395-186
3,946,220	3/1976	Brobeck et al.	705-25
3,956,615	5/1976	Anderson et al.	380-24
3,958,081	5/1976	Ehrsam et al.	380-29
3,970,992	7/1976	Boothroyd et al.	705-43
4,048,619	9/1977	Forman, Jr. et al.	376-485
4,071,911	1/1978	Mazur	364-130
4,112,421	9/1978	Freeny, Jr.	342-457
4,120,030	10/1978	Johnstone	380-4
4,163,280	7/1979	Mori et al.	711-207
4,168,396	9/1979	Best	380-4
4,196,310	4/1980	Forman et al.	380-46
4,200,913	4/1980	Kuhar et al.	341-23
4,209,787	6/1980	Freeny, Jr.	342-457
4,217,588	8/1980	Freeny, Jr.	342-458
4,220,991	9/1980	Hamano et al.	705-18
4,232,193	11/1980	Gerard	380-36
4,232,317	11/1980	Freeny, Jr.	342-464
4,236,217	11/1980	Kennedy	702-61

4,253,157	2/1981	Kirschner et al.	707-10A
4,262,329	4/1981	Bright et al.	380-4
4,265,371	5/1981	Desai et al.	222-639
4,270,182	5/1981	Asija	707-1
4,278,837	7/1981	Best	380-24
4,305,131	12/1981	Best	380-4
4,306,289	12/1981	Lumley	380-4
4,309,569	1/1982	Merkle	380-23
4,319,079	3/1982	Best	380-4
4,323,921	4/1982	Guillou	380-18
4,328,544	5/1982	Baldwin et al.	705-24
4,337,483	6/1982	Guillou	380-20
4,361,877	11/1982	Dyer et al.	702-176
4,375,579	3/1983	Davida et al.	380-28
4,433,207	2/1984	Best	380-4
4,434,464	2/1984	Suzuki et al.	711-164
4,442,486	4/1984	Mayer	395-186
4,446,519	5/1984	Thomas	711-164
4,454,594	6/1984	Heffron et al.	395-186
4,458,315	7/1984	Uchenick	380-4
4,462,076	7/1984	Smith, III	380-4
4,462,078	7/1984	Ross	380-4
4,465,901	8/1984	Best	380-4
4,471,163	9/1984	Donald et al.	380-4
4,484,217	11/1984	Block et al.	348-3
4,494,156	1/1985	Kadison et al.	360-48
4,513,174	4/1985	Herman	380-4
4,528,588	7/1985	Lofberg	348-5.5
4,528,643	7/1985	Freeny, Jr.	380-4
4,553,252	11/1985	Egendorf	377-15
4,558,176	12/1985	Arnold et al.	380-4
4,558,413	12/1985	Schmidt et al.	707-203
4,562,306	12/1985	Chou et al.	360-78.4
4,562,495	12/1985	Bond et al.	360-60
4,577,289	3/1986	Comerford et al.	360-774
4,584,641	4/1986	Guglielmino	380-4
4,588,991	5/1986	Atalla	380-4
4,589,064	5/1986	Chiba et al.	791-164
4,593,353	6/1986	Pickholtz	380-4
4,593,376	6/1986	Volk	705-16
4,595,950	6/1986	Lofberg	380-4
4,597,058	6/1986	Izumi et al.	380-23
4,622,222	11/1986	Johnson	73-602
4,634,807	1/1987	Chorley et al.	705-24
4,644,493	2/1987	Chandra et al.	702-176
4,646,234	2/1987	Tolman et al.	380-4
4,652,990	3/1987	Pailen et al.	380-4
4,658,093	4/1987	Hellman	380-23
4,670,857	6/1987	Rackman	380-4
4,672,572	6/1987	Alsberg	380-23
4,677,434	6/1987	Fascenda	380-23
4,680,731	7/1987	Izumi et al.	365-52
4,683,553	7/1987	Mollier	380-4
4,685,056	8/1987	Barnsdale et al.	711-164
4,688,169	8/1987	Joshi	340-825.3
4,691,350	9/1987	Kleijne et al.	380-4
4,696,034	9/1987	Wiedemer	380-4

4,701,846	10/1987	Ikeda et al.	711-163
4,712,238	12/1987	Gilhousen et al.	380-20
4,713,753	12/1987	Boebert et al.	711-164
4,727,550	2/1988	Chang et al.	372-2
4,740,890	4/1988	William	395-186
4,747,139	5/1988	Taaffe	536-28.5
4,757,534	7/1988	Matyas et al.	380-25
4,757,553	7/1988	Allen et al.	380-25
4,768,087	8/1988	Taub et al.	380-4
4,791,565	12/1988	Dunham et al.	380-4
4,796,181	1/1989	Wiedemer	380-4
4,798,209	1/1989	Klingenbeck et al.	128-653
4,799,156	1/1989	Shavit et al.	705-26
4,807,288	2/1989	Ugon et al.	349-184
4,817,140	3/1989	Chandra et al.	380-4
4,823,264	4/1989	Deming	374-117
4,827,508	5/1989	Shear	380-4
4,858,121	8/1989	Barber et al.	705-2
4,864,494	9/1989	Kobus	364-200
4,868,877	9/1989	Fischer	380-25
4,903,296	2/1990	Chandra et al.	395-186
4,924,378	5/1990	Hershey et al.	348-3
4,930,073	5/1990	Cina, Jr.	395-726
4,949,187	8/1990	Cohen	380-25
4,977,594	12/1990	Shear	380-4
4,999,806	3/1991	Chernow et al.	395-712
5,001,752	3/1991	Fischer	380-23
5,005,122	4/1991	Griffin et al.	380-4
5,005,200	4/1991	Fisher	380-30
5,010,571	4/1991	Katznelson	395-186
5,023,907	6/1991	Johnson et al.	395-186
5,047,928	9/1991	Wiedemer	380-4
5,048,085	9/1991	Abraham et al.	380-4
5,050,213	9/1991	Shear	38-25
5,091,966	2/1992	Bloomberg et al.	382-203
5,103,392	4/1992	Mori	702-176
5,103,476	4/1992	Waite	380-4
5,111,390	5/1992	Ketcham	395-705
5,119,493	6/1992	Janis et al.	395-704
5,128,525	7/1992	Stearns et al.	235-454
5,136,643	8/1992	Fischer	380-23
5,136,646	8/1992	Haber et al.	380-49
5,136,647	8/1992	Haber et al.	380-49
5,136,716	8/1992	Harvey et al.	395-200.58
5,146,575	9/1992	Nolan, Jr.	711-164
5,148,481	9/1992	Abraham et al.	380-46
5,155,680	10/1992	Wiedemer	380-4
5,168,147	12/1992	Bloomberg	235-456
5,185,717	2/1993	Mori	365-52
5,201,046	4/1993	Goldberg et al.	707-100
5,201,047	4/1993	Maki et al.	707-4
5,208,748	5/1993	Flores et al.	704-1
5,214,702	5/1993	Fischer	380-30
5,216,603	6/1993	Flores et al.	704-1
5,221,833	6/1993	Hecht	235-494
5,222,134	6/1993	Waite et al.	380-4
5,224,160	6/1993	Paulini et al.	380-4

5,224,163	6/1993	Gasser et al.	380-30
5,227,797	7/1993	Murphy	342-22
5,235,642	8/1993	Wobber et al.	380-25
5,245,165	9/1993	Zhang	235-454
5,247,575	9/1993	Sprague et al.	380-9
5,260,999	11/1993	Wyman	380-4
5,263,158	11/1993	Janis	707-1
5,265,164	11/1993	Matyas	380-30
5,276,735	1/1994	Boebert et al.	380-21
5,280,479	1/1994	Mary	370-462
5,285,494	2/1994	Sprecher et al.	455-423
5,301,231	4/1994	Abraham et al.	380-4
5,311,591	5/1994	Fischer	380-4
5,319,705	6/1994	Halter et al.	380-4
5,337,360	8/1994	Fischer	380-4
5,341,429	8/1994	Stringer et al.	380-23
5,343,527	8/1994	Moore	705-37
5,347,579	9/1994	Blandford	388-25
5,351,293	9/1994	Michener et al.	706-10
5,355,474	10/1994	Thuraisngham et al.	707-9
5,373,561	12/1994	Haber et al.	380-49
5,390,247	2/1995	Fischer	380-49
5,390,330	2/1995	Talati	395-703
5,392,220	2/1995	van den Hamer et al.	364-488
5,392,390	2/1995	Crozier	345-335
5,394,469	2/1995	Nagel et al.	380-4
5,410,598	4/1995	Shear	380-4
5,412,717	5/1995	Fischer	380-23
5,421,006	5/1995	Jablon	395-183.12
5,422,953	6/1995	Fischer	380-25
5,428,606	6/1995	Moskowitz	380-4
5,438,508	8/1995	Wyman	705-8
5,442,645	8/1995	Ugon	371-25.1
5,444,779	8/1995	Daniele	380-3
5,449,895	9/1995	Hecht et al.	235-494
5,449,896	9/1995	Hecht et al.	235-494
5,450,493	9/1995	Maher	380-4
5,453,601	9/1995	Rosen	380-24
5,453,605	9/1995	Hecht et al.	235-494
5,455,407	10/1995	Rosen	235-380
5,455,861	10/1995	Faucher et al.	380-9
5,455,953	10/1995	Russell	395-739
5,457,746	10/1995	Dolphin	
5,463,565	10/1995	Cookson et al.	711-113
5,473,687	12/1995	Lipscomb et al.	388-4
5,473,692	12/1995	Davis	380-25
5,479,509	12/1995	Ugon	380-23
5,485,622	1/1996	Yamaki	395-186
5,491,800	2/1996	Goldsmith et al.	395-200.51
5,497,479	3/1996	Hornbuckle	463-29
5,497,491	3/1996	Mitchell et al.	395-683
5,499,298	3/1996	Narasimhalu et al.	380-25
5,504,757	4/1996	Cook et al.	370-468
5,504,818	4/1996	Okano	380-4
5,504,837	4/1996	Griffeth et al.	380-4
5,508,913	4/1996	Yamamoto et al.	380-4
5,509,070	4/1996	Schull	380-49

5,513,261	4/1996	Maher	380-23
5,530,235	6/1996	Stefik et al.	235-492
5,530,752	6/1996	Rubin	380-4
5,533,123	7/1996	Force et al.	405-37
5,534,975	7/1996	Stefik et al.	399-1
5,537,526	7/1996	Anderson et al.	707-515
5,539,735	7/1996	Moskowitz	380-4
5,539,828	7/1996	Davis	380-23
5,550,971	8/1996	Brunner et al.	707-3
5,553,282	9/1996	Parrish et al.	707-10
5,557,518	9/1996	Rosen	380-24
5,563,946	10/1996	Cooper et al.	380-4
5,568,552	10/1996	Davis	380-4
5,572,673	11/1996	Shurts	395-186
5,592,549	1/1997	Naget et al.	380-4
5,606,609	2/1997	Houser et al.	380-4
5,613,004	3/1997	Cooperman et al.	380-28
5,621,797	4/1997	Rosen	380-24
5,629,980	5/1997	Stefik et al.	380-4
5,633,932	5/1997	Davis et al.	380-25
5,634,012	5/1997	Stefik et al.	705-39
5,636,292	6/1997	Rhoads	382-232
5,638,443	6/1997	Stefik	380-4
5,638,504	6/1997	Scott et al.	707-530
5,640,546	6/1997	Gopinath et al.	395-551
5,655,077	8/1997	Jones et al.	395-187.1
5,687,236	11/1997	Moskowitz et al.	380-28
5,689,587	11/1997	Bender et al.	382-232
5,692,180	11/1997	Lee	707-10
5,710,834	1/1998	Rhoads	382-232
5,740,549	4/1998	Reilly et al.	705-14
5,745,604	4/1998	Rhoads	382-232
5,748,763	5/1998	Rhoads	382-115
5,748,783	5/1998	Rhoads	382-232
5,748,960	5/1998	Fischer	395-683
5,754,849	5/1998	Dyer et al.	707-101
5,757,914	5/1998	McManis	380-23
5,758,152	5/1998	LeTourneau	707-102
5,765,152	1/1998	Erickson	707-9
5,768,426	6/1998	Rhoads	382-232

NON-U.S. PATENT DOCUMENTS

9 004 79	12/1984	BE (Belgium)
84 441	7/1983	EP (European Patent Office)
128672	12/1984	EP (European Patent Office)
A0135422	3/1985	EP (European Patent Office)
180460	5/1986	EP (European Patent Office)
370 146	11/1988	EP (European Patent Office)
399822A2	11/1990	EP (European Patent Office)
421409A2	4/1991	EP (European Patent Office)
456 386 A2	11/1991	EP (European Patent Office)
469 864 A3	2/1992	EP (European Patent Office)
469 864 A2	2/1992	EP (European Patent Office)
565 314 A2	10/1993	EP (European Patent Office)
593 305 A2	4/1994	EP (European Patent Office)
651 554 A1	5/1995	EP (European Patent Office)

668 695 A2	8/1995	EP (European Patent Office)
725 376	1/1996	EP (European Patent Office)
695 985 A1	1/1996	EP (European Patent Office)
696 798 A1	2/1996	EP (European Patent Office)
715247A1	6/1996	EP (European Patent Office)
715246A1	6/1996	EP (European Patent Office)
715245A1	6/1996	EP (European Patent Office)
715244A1	6/1996	EP (European Patent Office)
715243A1	6/1996	EP (European Patent Office)
778 513 A2	11/1996	EP (European Patent Office)
749081A1	12/1996	EP (European Patent Office)
795 873 A2	3/1997	EP (European Patent Office)
3803982A1	1/1990	DE (Germany)
57-726	5/1982	JP (Japan)
62-241061	10/1987	JP (Japan)
64-68835	3/1989	JP (Japan)
1-068835	3/1989	JP (Japan)
2-242352	9/1990	JP (Japan)
2-247763	10/1990	JP (Japan)
2-294855	12/1990	JP (Japan)
4-369068	12/1992	JP (Japan)
5-181734	7/1993	JP (Japan)
5-268415	10/1993	JP (Japan)
5-257783	10/1993	JP (Japan)
6-175794	6/1994	JP (Japan)
6225059	8/1994	JP (Japan)
6-215010	8/1994	JP (Japan)
7-084852	3/1995	JP (Japan)
7-056794	3/1995	JP (Japan)
7-141138	6/1995	JP (Japan)
7-200492	8/1995	JP (Japan)
7-200317	8/1995	JP (Japan)
7-244639	9/1995	JP (Japan)
8-137795	5/1996	JP (Japan)
8-152990	6/1996	JP (Japan)
8-185298	7/1996	JP (Japan)
A2136175	9/1984	GB (United Kingdom)
2264796	9/1993	GB (United Kingdom)
2264796A	9/1993	GB (United Kingdom)
2294348	4/1996	GB (United Kingdom)
2295947	6/1996	GB (United Kingdom)
WO A8502310	5/1985	WO (World Intellectual Property Org)
WO 85-03584	8/1985	WO (World Intellectual Property Org)
WO 90-02382	3/1990	WO (World Intellectual Property Org)
WO92-06438	4/1992	WO (World Intellectual Property Org)
WO 92-06438	4/1992	WO (World Intellectual Property Org)
WO92-22870	12/1992	WO (World Intellectual Property Org)
WO 92-22870	12/1992	WO (World Intellectual Property Org)
WO 93-01550	1/1993	WO (World Intellectual Property Org)
WO93-01550	1/1993	WO (World Intellectual Property Org)
WO 94-01821	1/1994	WO (World Intellectual Property Org)
WO94-03859	2/1994	WO (World Intellectual Property Org)
WO 94-03859	2/1994	WO (World Intellectual Property Org)
WO94-06103	3/1994	WO (World Intellectual Property Org)
WO 94-06103	3/1994	WO (World Intellectual Property Org)
WO 94-16395	7/1994	WO (World Intellectual Property Org)
WO. 94-18620	8/1994	WO (World Intellectual Property Org)

WO 94-22266	9/1994	WO (World Intellectual Property Org)
WO 94-27406	11/1994	WO (World Intellectual Property Org)
WO 96-00963	1/1996	WO (World Intellectual Property Org)
WO 96-06503	2/1996	WO (World Intellectual Property Org)
WO 96-05698	2/1996	WO (World Intellectual Property Org)
WO 96-03835	2/1996	WO (World Intellectual Property Org)
WO96-13013	5/1996	WO (World Intellectual Property Org)
WO 96-13013	5/1996	WO (World Intellectual Property Org)
WO96-21192	7/1996	WO (World Intellectual Property Org)
WO 96-21192	7/1996	WO (World Intellectual Property Org)
WO 97-03423	1/1997	WO (World Intellectual Property Org)
WO97-07656	3/1997	WO (World Intellectual Property Org)
WO97-32251	9/1997	WO (World Intellectual Property Org)
WO 97-48203	12/1997	WO (World Intellectual Property Org)

OTHER REFERENCES

Applications Requirements for Innovative Video Programming; How to Foster (or Cripple) Program Development Opportunities for Interactive Video Programs Delivered on Optical Media; A Challenge for the Introduction of DVD (Digital Video Disc) (19-20 Oct. 1995, Sheraton Universal Hotel, Universal City CA).

Bruner, Rick E., PowerAgent, NetBot help advertisers reach Internet shoppers, Aug. 1997 (Document from Internet).

CD ROM, Introducing . . . The Workflow CD-ROM Sampler, Creative Networks, MCIMail: Creative Networks, Inc., Palo Alto, California.

Clark, Tim, Ad service gives cash back, www.news.com, Aug. 4, 1997, 2 pages (Document from Internet).

Dempsey, et al., D-Lib Magazine, Jul./Aug. 1996 The Warwick Metadata Workshop: A Framework for the Deployent of Resource Description, Jul. 15, 1966.

Firefly Network, Inc., www.ffly.com, What is Firefly? Firefly revision: 41.4 Copyright 1995, 1996.

Gleick, James, "Dead as a Dollar" The New York Times Magazine, Jun. 16, 1996, Section 6, pp. 26-30, 35, 42, 50, 54.

Harman, Harry H., Modern Factor Analysis, Third Edition Revised, University of Chicago Press Chicago and London, Third revision published 1976.

Herzberg, Amir et al., Public Protection of Software, ACM Transactions on Computer Systems, vol. 5, No. 4, Nov. 1987, pp. 371-393.

Holt, Stannie, Start- up promises user confidentiality in Web marketing service, Info World Electric, Aug. 13, 1997 (Document from Internet).

Jiang, et al, A concept-Based Approach to Retrieval from an Electronic Industrialn Directory, International Journal of Electronic Commerce, vol. 1, No. 1, Fall 1996, pp. 51-72.

Jones, Debra, Top Tech Stories, PowerAgent Introducts First Internet

`Infomediary` to Empower and Protect Consumers, Aug. 13, 1997 3 pages (Document from Internet).

Lagoze, Carl, D-Lib Magazine Jul./Aug 1996, The Warwick Framework, A Container Architecture for Diverse Sets of Metadata.

Maclachlan, Malcolm, PowerAgent Debuts Spam-Free Marketing, TechWire, Aug. 13, 1997, 3 pages (Document from Internet).

Mossberg, Walter S., Personal Technology, Threats to Privacy On-Line Become More Worrisome, Wall Street Journal, Oct. 24, 1996.

Negroponte, Electronic Word of Mouth, Wired Oct. 1996, p. 218.

PowerAgent Inc., Proper Use of Consumer Information on the Internet White Paper, Jun. 1997, Document from Internet, 9 pages (Document from Internet).

PowerAgent Press Releases, What the Experts are Reporting on PowerAgent, Aug. 13, 1997, 6 pages (Document from Internet).

PowerAgent Press Releases, What the Experts are Reporting on PowerAgent, Aug. 4, 1997, 5 pages (Document from Internet).

PowerAgent Press Releases, What the Experts are Reporting on PowerAgent, Aug. 13, 1997, 3 pages (Document from Internet).

Resnick, et al., Recommender Systems, Communications of the ACM, vol. 40, No. 3, Mar. 1997,pp. 56-89.

Rothstein, Edward, The New York Times, Technology, Connections, Making th eInternet come to you, through `push` technology . . . p. D5, Jan. 20, 1997.

Rutkowski, Ken, PowerAgent Introduces First Internet `Infomediary` to Empower and Protect Consumers, Tech Talk News Story, Aug. 4, 1997 (Document from Internet).
Sager, Ira (Edited by), Bits & Bytes, Business Week, Sep. 23, 1996, p. 142E.

Schurmann, Jurgen, Pattern Classification, A Unified View of Statistical and Neural Approaches, John Wiley & Sons, Inc., 1996.

Special Report, The Internet:Fulfilling the Promise The Internet: Bring Order From Chaos; Lynch, Clifford, Search the Internet; Resnick, Paul, Filtering Information on the Internet; Hearst, Marti A., Interfaces for Searching the Web; Stefik, Mark, Trusted Systems; Scientific American, Mar. 1997, pp. 49-56, 62-64, 68-72, 78-81.

Stefik, Mark, Introduction to Knowledge Systems, Chapter 7, Classification, pp. 543-607, 1995 by Morgan Kaufmann Publishers, Inc.

Voight, Joan, Beyond the Banner, Wired, Dec. 1996, pp. 196, 200, 204.

Vonder Haar, Steven, PowerAgent Launches Commerical Service, Inter ctive Week, Aug. 4, 1997 (Document from Internet).

Argent Information Q&A Sheet, http://www.digital-watermark.com/, Copyright

1995, The Dice Company, 7 pages.

Arneke, David, et al., News Release, AT&T, Jan. 9, 1995, AT&T encryption system protects information services, 1 page.

AT&T Technology, vol. 9, No. 4, New Products, Systems and Services, pp. 16-19.

Baggett, Claude, Cable's Emerging Role in the Information Superhighway, Cable Labs, 13 slides.

Barassi, Theodore Sedgwick, Esq., The Cybernotary: Public Key Registration and Certificaiton and Authentication of International Legal Transactions, 4 pages.

Barnes, Hugh, memo to Henry LaMuth, subject: George Gilder articles, May 31, 1994.

Bart, Dan, Comments in the Matter of Public Hearing and Request for Comments on the International Aspects of the National Information Infrastructure, Aug. 12, 1994.

Baum, Michael, Worldwide Electronic Commerce: Law, Policy and Controls Conference, program details, Nov. 11, 1993.

Bisbey, II et al., Encapsulation: An Approach to Operating System Security, Oct. 1973, pp. 666-675.

Blom et al., Encryption Methods in Data Networks, Ericsson Technics, No. 2, 1978, Stockholm, Sweden.

Cable Television and America's Telecommunications Infrastructure, National Cable Television Association, Apr. 1993.

Caruso, Technology, Digital Commerce 2 plans for watermarks, which can bind proof of authorship to electronic works, New York Times (Aug. 1995).

Choudhury, et al., Copyright Protection for Electronic Publishing over Computer Networks, AT&T Bell Laboratores, Murray Hill, New Jersey 07974 (Jun. 1994).

Codercard, Spec Sheet--Basic Coder Subsystem, No date given.

Communications of the ACM, Intelligent Agents, Jul. 1994, vol. 37, No. 7.
Communications of the ACM, Jun. 1996, vol. 39, No. 6.

Computer Systems Policy Project (CSSP), Perspectives on the National Information Infrastrucure: Ensuring Interoperability (Feb. 1994), Feb. 1994.

Cunningham, Donna, et al., News Release, AT&T, Jan. 31, 1995, AT&T, VLSI Technology join to improve info highway security, 3 pages.

Data Sheet, About the Digital Notary Service, Surety Technologies, Inc., 1994-1995, 6 pages.

Denning et al., Data Security, 11 Computing Surveys No. 3, Sep. 1979.

Diffie, Whitfield and Martin E. Hellman, IEEE Transactions on Information Theory, vol. 22, No. 6, Nov. 1976, New Directions in Cryptography, pp. 644-651.

Diffie, Whitfield and Martin E. Hellman, Proceedings of the IEEE, vol. 67, No. 3, Mar. 1979, Privacy and Authentication: An Introduction to Cryptography, pp. 397-427.
Digest of Papers, VLSI: New Architectural Horizons, Feb. 1980, Preventing Software Piracy With Crypto-Microprocessors, Robert M. Best, pp. 466-469.

DiscStore (Electronic Publishing Resources 1991).

Document from Internet, cgi
ncsa.uiuc.edu, CGI Common Gateway Interface, 1 page, 1996.

DSP56000/DSP56001 Digital Signal Processor User's Manual, Motorola, 1990, p. 2-2.

Dusse, Stephen R. and Burton S. Kaliski A Cryptographic Library for the Motorola 56000 in Damgard, I.M., Advances in Cryptology-Proceedings Eurocrypt 90, Springer-Verlag, 1991, pp. 230-244.

Dyson, Esther, Intellectual Value, Wired Magazine, Jul. 1995, pp. 136-141 and 182-184.

Effector Online vol. 6, No. 6, A Publication of the Electronic Frontier Foundation, 8 pages, Dec. 6, 1993.

EIA and TIA White Paper on National Information Infrastructure,published by the Electronic Industries Association and the Telecommunications Industry Association, Washington, D.C., no date.

Electronic Currency Requirements, XIWT (Cross Industry Working Group), no date.

Electronic Publishing Resources Inc. Protecting Electronically Published Properties Increasing Publishing Profits (Electronic Publishing Resources 1991).

First CII Honeywell Bull International Symposium on Computer Security and Confidentiality, Jan. 26-28, 1981, Conference Text, pp. 1-21.

Framework for National Information Infrastructure Services, Draft, U.S. Department of Commerce, Jul. 1994.

Framework for National Information Infrastructure Services, NIST, Jul. 1994, 12 slides.

Garcia, D. Linda, testimony before a hearing on science, space and technology, May 26, 1994.
Green paper, Intellectual Property and the National Information Infrastructure, a Preliminary Draft of the Report of the Working Group on Intellectual Property Rights, Jul. 1994.

Greguras, Fred, Softic Symposium '95, Copyright Clearances and Moral Rights, Nov. 30, 1995 (as updated Dec. 11, 1995), 3 pages.

Guillou, L.: Smart Cards and Conditional Access, pp. 480-490 Advances in Cryptography, Proceedings of EuroCrypt 84 (Beth et al, Ed., Springer-Verlag 1985).

Hofmann, Jud, Interfacing the NII to User Homes, Electronic Industries Association, Consumer Electronic Bus Committee, 14 slides, no date.

HotJava(tm) : The Security Story, 4 pages.

IBM Technical Disclosure Bulletin, Multimedia Mixed Object Envelopes Supporting a Graduate Fee Scheme via Encryption, vol. 37, No. 03, Mar. 1994, Armonk, NY.

IBM Technical Disclosure Bulletin, Transformer Rules for Software Distribution Mechanism-Support Products, vol. 37, No. 04B, Apr. 1994, Armonk, NY.

IISP Break Out Session Report for Group No. 3, Standards Development and Tracking System, no date.

Information Infrastructure Standards Panel: NII The Information Superhighway, Nations Bank--HGDeal--ASC X9, 15 pages.

Invoice? What is an Invoice? Business Week, Jun. 10, 1996.

JavaSoft, Frequently Asked Questions--Applet Security, What's Java(tm) ? Products and Services, Java/Soft News, Developer's Cornier,Jun. 7, 1996, 8 pages.

Kelly, Kevin, Whole Earth Review, E-Money,pp. 40-59, Summer 1993.

Kent, Protecting Externally Supplied Software In Small Computers (MIT/LCS/TR-255 Sep. 1980).

Kohntopp, M., Sag's durch die Blume, Apr. 1996, marit schulung.netuse.de.

Kristol et al., Anonymous Internet Mercantile Protocol, AT&T Bell Laboratories, Murray Hill, New Jersey, Draft: Mar. 17, 1994.

Lanza, Mike, electronic mail, George Gilder's Fifth Article--Digital Darkhorse--Newspapers, Feb. 21, 1994.

Levy, Steven, Wired, E-Money, That's What I Want, 10 pages, Dec. 1994.

Low et al., Anonymous Credit Cards and its Collusion Analysis, AT&T Bell Laboratories, Murray Hill, New Jersey, Oct. 10, 1994.

Low et al., Anonymous Credit Cards, AT&T Bell Laboratories, Proceedings of the 2nd ACM Conference on Computer and Communications Security, Fairfax, Virginia, Nov. 2-4, 1994.

Low et al., Document Marking and Identification using both Line and Word Shifting, AT&T Bell Laboratories, Murray Hill, New Jersey, Jul. 29, 1994.

Maxemchuk, Electronic Document Distribution, AT&T Bell Laboratories, Murray Hill, New Jersey 07974.

Micro Card--Micro Card Technologies, Inc., Dallas, Texas, No date given.

Milbrandt, E., Stenanography Info and Archive, 1996.

Mori, Ryoichi and Masaji Kawahara, The Transactions of the EIEICE, V, Superdistribution: The Concept and the Architecture, E73 (Jul. 1990), No. 7, Tokyo, Japan.

Negroponte, Nicholas, Telecommunications, Some Thoughts on Likely and expected Communications scenarios: A Rebuttal, pp. 41-42, Jan. 1993.

Neumann, et al., A Provably Secure Operating System: The System, Its Applications, and Proofs, Computer Science Labortory Report CSL-116, Second Edition, SRI International (May 1980).

News Release, Premenos Announces Templar 2.0--Next Generation Software for Secure Internet EDI, webmaster
templar.net, 1 page, Jan. 17, 1996.

News Release, The Document Company Xerox, Xerox Announces Software Kit for Creating Working Documents with Dataglyphs, Nov. 6, 1995, Minneapolis, MN, 13 pages.
News Release, The White House, Office of the President, Background on the Administration's Telecommunications Policy Reform Initiative, Jan. 11, 1994.

NII, Architecture Requirements, XIWT, no date.

Open System Environment Architectural Framework for National Information Infrastructure Services and Standards, in Support of National Class Distributed Systems, Distributed System Engineering Program Sponsor Group, Draft 1.0, Aug. 5, 1994.

Pelton, Dr. Joseph N., Telecommunications, Why Nicholas Negroponte is Wrong About the Future of Telecommunication, pp. 35-40, Jan. 1993.

Portland Software's ZipLock, Internet information, Copyright Portland Software 1996-1997, 12 pages.

Premenos Corp. White Paper: The Future of Electronic Commerce, A Supplement to Midrange Systems, Internet webmaster
premenos.com, 4 pages.

Press Release, National Semiconductor and EPR Partner For Information Metering/Data Security Cards (Mar. 4, 1994).

Rankine, G., Thomas--A Complete Single-Chip RSA Device, Advances in Cryptography, Proceedings of Crypto 86, pp. 480-487 (A.M. Odlyzko Ed., Springer-Verlag 1987).

Reilly, Arthur K., Standards committee T1-Telecommunications, Input to the `International Telecommunications Hearings,` Panel 1: Component Technologies of the NII/GII; no date.

ROI (Personal Library Software, 1987 or 1988).

ROI-Solving Critical Electronic Publishing Problems (Personal Library Software, 1987 or 1988).

Rose, Lance, Cyberspace and the Legal Matrix: Laws or Confusion?, 1991.

Rosenthal, Steve, New Media, Interactive Network: Viewers Get Involved, pp. 30-31, Dec. 1992.

Rosenthal, Steve, New Media, Interactive TV: The Gold Rush Is On, pp. 27-29, Dec. 1992.

Rosenthal, Steve, New Media, Mega Channels, pp. 36-46, Sep. 1993.

Schlossstein, Steven, International Economy, America: The G7's Comeback Kid, Jun./Jul. 1993.

Scnaumueller-Bichl et al., A Method of Software Protection Based on the Use of Smart Cards and Cryptographic Techniques, No date given.

Serving the Community: A Public-Interest Vision of the National Information Infrastructure, Computer Professionals for Social Responsibility, Executive Summary, no date.

Shear, Solutions for CD-ROM Pricing and Data Security Problems, pp. 530-533, CD ROM Yearbook 1988-1989 (Microsoft Press 1988 or 1989).

Smith et al., Signed Vector Timestamps: A Secure Protocol for Partial Order Time, CMU-93-116, School of Computer Science Carnegie Mellon University, Pittsburgh, Pennsylvania, Oct. 1991; version of Feb. 1993.

Stefik, Internet Dreams: Archetypes, Myths, and Metaphors, Letting Loose the Light: Igniting Commerce in Electronic Publication, pp. 219-253, (1996) Massachusetts Institute of Technology.

Stefik, Mark, Letting Loose the Light, Igniting Commerce in Electronic Publication, (1994, 1995) Palo Alto, California.

Stephenson, Tom, Advanced Imaging, The Info Infrastructure Initiative: Data SuperHighways and You, pp. 73-74, May 1993.

Sterling, Bruce, Literary freeware: Not for Commercial Use, remarks at Computers, Freedon and Privacy Conference IV, Chicago, Mar. 26, 1994.

Struif, Bruno The Use of Chipcards for Electronic Signatures and Encryption in: Proceedings for the 1989 Conference on VSLI and Computer Peripherals, IEEE Computer Society Press, 1989, pp. 4/155-4/158.

Suida, Karl, Mapping New Applications Onto New Technologies, Security Services in Telecommunications Networks, Mar. 8-10, 1988, Zurich.

Templar Overview,: Premenos, Internet info
templar.net, 4 pages.

Templar Software and Services: Secure, Reliable, Standards-Based EDI Over the Internet, Prementos, Internet info
templar.net, 1 page.

The 1:1 Future of the Electronic Marketplace: Return to a Hunting and Gathering Society, 2 pages, no date.

The Benefits of ROI For Database Protection and Usage Based Billing (Personal Library Software, 1987 or 1988).

The New Alexandria No. 1, Alexandria Institute, pp. 1-12, Jul.-Aug. 1986.

Tygar et al., Cryptography: It's Not Just For Electronic Mail Anymore, CMU-CS-93-107, School of Computer Science Carnegie Mellon University, Pittsburgh, Pennsylvania, Mar. 1, 1993.

Tygar et al., Dyad: A System for Using Physically Secure Coprocessors, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA 15213 (undated).

Tygar et al., Dyad: A System for Using Physically Secure Coprocessors, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA 15213 (May 1991).

Valovic T., Telecommunications, The Role of Computer Networking in the Emerging Virtual Marketplace, pp. 40-44.

Weber, Dr. Robert, Digital Rights Management Technologies, A Report to the International Federation of Reproduction Rights Organisations, Oct. 1995,pp. 1-49.

Weber, Dr. Robert, Digital Rights Management Technologies, Oct. 1995, 21 pages.

Weber, Metering Technologies for Digital Intellectual Property, A Report to the International Federation of Reproduction Rights Organisations, pp. 1-29; Oct. 1994, Boston, MA, USA.

Weder, Adele, Life on the Infohighway, 4 pages, no date.

Weingart, Physical Security for the :Abyss System, IBM Thomas J. Watson Research Center, Yorktown Heights, New York 10598 (1987).

Weitzner, Daniel J., A Statement on EFF's Open Platform Campaign as a Nov., 1993, 3 pages.

Wepin Store, Stenography (Hidden Writing) (Common Law 1995).

White, Abyss: A Trusted Architecture for Software Protection, IBM Thomas J. Watson Research Center, Yorktown Heights, New York 10598 (1987).

Wired 1.02, Is Advertising Really dead?, Part 2, 1994.

World Wide Web FAQ, How can I put an access counter on my home page?, 1 page, 1996.

XIWT Cross Industry Working Team, 5 pages, Jul. 1994.

Yee, Using Secure Coprocessors, CMU-CS-94-149, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA15213.

Yellin, F. Low Level Security in Java, 8 pages.

PRIMARY EXAMINER: Beausoliel, Jr., Robert W.
ASST. EXAMINER: Elisca, Pierre F.
ATTORNEY, AGENT, OR FIRM: Nixon & Vanderhye P.C.
CLAIMS: 220
EXEMPLARY CLAIM: 1
DRAWING PAGES: 163
DRAWING FIGURES: 177
ART UNIT: 275
FULL TEXT: 20922 lines

ABSTRACT

The present invention provides systems and methods for electronic commerce including secure transaction management and electronic rights protection. Electronic appliances such as computers employed in accordance with the present invention help to ensure that information is accessed and used only in authorized ways, and maintain the integrity, availability, and/or confidentiality of the information. Secure subsystems used with such electronic appliances provide a distributed virtual distribution environment (VDE) that may enforce a secure chain of handling and control, for example, to control and/or meter or otherwise monitor use of electronically stored or disseminated information. Such a virtual distribution environment may be used to protect rights of various participants in electronic commerce and other electronic or electronic-facilitated transactions. Secure distributed and other operating system environments and architectures, employing, for example, secure semiconductor processing arrangements that may establish secure, protected environments at each node. These techniques may be used to support an end-to-end electronic information distribution capability that may be used, for example, utilizing the "electronic highway."

... be used for supporting electronic currency, billing, payment and credit related activities, and/ or for user profile analysis and/or broader market survey analysis and marketing (consolidated) list generation or other information...depending on user selected currency). Such usage can be metered while an additional audit for user profile purposes can be prepared recording the identity of each filed displayed. Additionally, further metering can...
... to the remainder of the operating system. Such modularization and standardized interfacing permits different vendors/ operating system programmers to create different portions of the operating system independently, and also allows the functionality...

1/2,AB,KWIC/8 (Item 5 from file: 654)
DIALOG(R)File 654:US Pat.Full.

02935971
Utility
COMMON CHANNELING SIGNALING NETWORK MAINTENANCE AND TESTING

PATENT NO.: 5,892,812

ISSUED: April 06, 1999 (19990406)
INVENTOR(s): Pester, III, Eugene M., Wyndmoor, PA (Pennsylvania), US (United States of America)
ASSIGNEE(s): C & P of Virginia, (A U.S. Company or Corporation), Richmond, VA (Virginia), US (United States of America)
APPL. NO.: 8-869,977
FILED: June 05, 1997 (19970605)

This application is a continuation of application Ser. No. 08-660,055 filed May 7, 1996, now U.S. Pat. No. 5,715,294 which is a continuation of U.S. application Ser. No. 08-470,568 filed Jun. 6, 1995 now U.S. Pat. No. 5,563,930 issued Oct. 8, 1996 which is a continuation of U.S. application Ser. No. 08-018,457 filed Feb. 16, 1993 now U.S. Pat. No. 5,475,732 issued Dec. 12, 1995.

U.S. CLASS: 379-34 cross ref: 370-241; 370-250; 379-22; 379-32; 379-230
INTL CLASS: [6] H04M 1-24; H04M 3-04; H04M 3-22; H04J 1-00
FIELD OF SEARCH: 379-1; 379-17; 379-16; 379-15; 379-14; 379-13; 379-12; 379-11; 379-10; 379-9; 379-32; 379-34; 370-241; 370-242; 370-245; 370-250; 370-258; 370-252

References Cited

U.S. PATENT DOCUMENTS

4,885,739	12/1989	Reed et al.	
5,375,159	12/1994	Williams	
5,457,729	10/1995	Hamman et al.	379-34
5,570,410	10/1996	Hooshiari	379-10
5,592,530	1/1997	Brockman et al.	379-34
5,921,489	12/1997	Morgan et al.	

OTHER REFERENCES

"Common Channel Signaling Switching System Requirements" Module of TR-TSY-000064, Section 6.5, LSSGR Issue 2, Jul. 1987.

PRIMARY EXAMINER: Loomis, Paul
ATTORNEY, AGENT, OR FIRM: McDermott, Will & Emery
CLAIMS: 11
EXEMPLARY CLAIM: 6
DRAWING PAGES: 109
DRAWING FIGURES: 110
ART UNIT: 273
FULL TEXT: 8292 lines

ABSTRACT

An SS7 Network Preventative Maintenance System for detecting potential SS7 and switched network troubles, automatically analyzing the troubles, providing alarm and corrective action to avoid major network events. Real time monitors on SS7 links at the STP provide information on exceeded link load, exceeded Message Signaling Unit (MSU) frequency and network management status/error conditions in a Stage 1 Process. The Stage 1 Process provides alarm information to a Stage 2 Process which controls all

Stage 1 associated monitors for an STP pair. Stage 2 reacts to Stage 1 signals to generate alarm and corrective action information which is passed on to a Stage 3 Process. The Stage 3 Process controls all Stage 2 Processes in the operating company. Stage 3 reacts to Stage 2 output to detect potential or real accompanying network trouble and generates alarm and corrective action information and displays in response thereto. Stage 3 also alerts a Stage 4 process which is connected to all Stage 3 Processes in a region. Stage 4 analyzes data from Stage 3 to determine if similar trouble could happen in another network where upon Stage 4 informs affected Stage 3 Processes regarding the same. Corrective action/trouble verification information is generated and passed on. An Interface to the network's surveillant system is provided.

...milliseconds, of the interval

"MSU Interval Threshold Variables" can be changed using "Modify MSU Interval Variable Information" sent from the Stage 1 process. There are two types of thresholds, High and... Used to hold reactive trap script definitions

Report DB--Used to hold predefined report definitions

User Profile DB--Used to hold user log-ins, passwords and other user information

F. Provide report... to accommodate the terminal or process that is receive the information using information in the " User Profile Database". The "Corrective Action Text"content includes the following:

Text--Contains both text and embedded...

1/2,AB,KWIC/9 (Item 6 from file: 654)
DIALOG(R)File 654:US Pat.Full.

02850941

Utility
PROVISION OF SECURE ACCESS TO EXTERNAL RESOURCES FROM A DISTRIBUTED COMPUTING ENVIRONMENT

PATENT NO.: 5,815,574
ISSUED: September 29, 1998 (19980929)
INVENTOR(s): Fortinsky, Michael S., Netanya, IL (Israel)
ASSIGNEE(s): International Business Machines Corporation, (A U.S. Company or Corporation), Armonk, NY (New York), US (United States of America)
[Assignee Code(s): 42640]
APPL. NO.: 8-563,692
FILED: November 28, 1995 (19951128)
PRIORITY: 2138302, CA (Canada), December 15, 1994 (19941215)
U.S. CLASS: 380-25
INTL CLASS: [6] H04L 9-00
FIELD OF SEARCH: 380-25; 380-21

References Cited
U.S. PATENT DOCUMENTS

5,214,700	5/1993	Pinkas et al.	380-25
5,220,603	6/1993	Parker	380-25
5,339,403	8/1994	Parker	380-25
5,349,643	9/1994	Cox et al.	380-25
5,481,613	1/1996	Ford et al.	380-21
5,491,752	2/1996	Kaufman et al.	380-25
5,495,533	2/1996	Linehan et al.	380-25
5,535,276	7/1996	Ganesan	380-25
5,537,475	7/1996	Micali	380-25
5,590,199	12/1996	Krajewski, Jr. et al.	380-25
5,659,616	8/1997	Sodia	380-25

PRIMARY EXAMINER: Cangialosi, Salvatore
ATTORNEY, AGENT, OR FIRM: Cameron, Douglas W.; Drumheller, Ronald L.
CLAIMS: 4
EXEMPLARY CLAIM: 1
DRAWING PAGES: 2
DRAWING FIGURES: 2
ART UNIT: 222
FULL TEXT: 1136 lines

ABSTRACT

In a distributed computing environment, in which a client needing to access a server is issued, by a security server, with a ticket including an encoded certificate identifying, when decoded, the identity and privilege attributes of the client in a format understood by a server within the environment, access to a resource external to the environment through such a server within the environment is provided, when a request involving such access is received by the security server, by issuing an extended certificate including additional data which can be decoded to provide information decoded as to the identity and privilege attributes of the client with respect to and in a format acceptable to the external server, the additional data being recognized and decodable and formatable by that server within the environment which provides access to the external server, but transmitted within the environment in a format compatible with the certificates in regular tickets. A security server issuing a ticket including such an extended privilege attribute certificate has a registry extended to include data as to a client's privilege attributes with respect to accessible external servers, together with data as to the structure in which such data is to be presented, and an application server required to handle such extended certificates has attribute handlers to structure the decoded data for presentation to the external server.

... environment released by the Open Software Foundation (hereinafter OSF(tm)) to support distributed computing involving heterogeneous machines and operating systems . The OSF distributed computing environment (hereinafter DCE) utilizes a ticket based security system based upon the Kerberos Network Authentication service...
... To access these resources, a client must present a complex attribute that contains a whole user profile (including userid's, group list, and other security data). Instead of specifying all the individual...

... attribute A2 is defined. An instance of attribute A2 contains in its value field a user profile . A2 can be used only if A2's attribute handler is installed at both the...

...target server. A2's handler is code that knows how to seal and extract a user profile into and from an XPAC. The administrator would specify the following data in the registry...

```
?log off
       14jun00 09:15:01 User219455 Session D634.5
            $1.49    0.275 DialUnits File275
     $1.49  Estimated cost File275
            $1.91    0.402 DialUnits File349
              $15.30  3 Type(s) in Format  5 (UDF)
           $15.30  3 Types
    $17.21  Estimated cost File349
          $152.09   25.778 DialUnits File654
              $19.20  6 Type(s) in Format  9 (UDF)
           $19.20  6 Types
   $171.29  Estimated cost File654
            OneSearch, 3 files, 26.455 DialUnits FileOS
     $0.90  TYMNET
   $190.89  Estimated cost this search
   $214.75  Estimated total session cost  37.707 DialUnits


### Status: Signed Off. (33 minutes)
```